

# SEARCH REQUEST FORM *24*

Requester's Full Name: DAVID Jones Examiner #: 79972 Date: 1/9/03  
Art Unit: 2622 Phone Number 301-782-3654 Serial Number: 07521850  
Mail Box and Bldg/Room Location: PK1-4F10 Results Format Preferred (circle): PAPER DISK E-MAIL

\*\*\*\*\*

Title of Invention: Image Processing Apparatus and Method and Storage  
Inventors (please provide full names): Kazuo H. Datta, Shigeo Yamaguchi, Taketo Harada  
Akiyoshi Matsuura

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Bitmap data Generation  
Image Processing  
Attribute information  
position overlapping

Color Printer

claims,  
1, 2, 8, 9, 10, 20

**BEST AVAILABLE COPY**

Searcher: Barbara Reynolds  
 Searcher Phone #: 306-3551  
 Searcher Location: PH2303  
 Date Searcher Picked Up: 7-12-04  
 Date Completed: 1-12-04  
 Searcher Prep & Review Time: 1 hr  
 Clerical Prep Time: \_\_\_\_\_  
 Online Time: 160

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 AA Sequence (#) \_\_\_\_\_  
 /Structure (#) \_\_\_\_\_  
 Bibliographic ☒ \_\_\_\_\_  
 Litigation \_\_\_\_\_  
 Fulltext ☒ \_\_\_\_\_  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

STN \_\_\_\_\_

Dialog ☒ \_\_\_\_\_

Questel/Orbit \_\_\_\_\_

Dr.Link \_\_\_\_\_

Lexis/Nexis \_\_\_\_\_

Sequence Systems \_\_\_\_\_

WWW/Internet ☒ \_\_\_\_\_

Other (specify) ☒ \_\_\_\_\_ 1666

File 344:Chinese Patents Abs Aug 1985-2003/Nov  
(c) 2003 European Patent Office  
File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)  
(c) 2004 JPO & JAPIO  
File 348:EUROPEAN PATENTS 1978-2003/Dec W02  
(c) 2003 European Patent Office  
File 349:PCT FULLTEXT 1979-2002/UB=20031225,UT=20031218  
(c) 2003 WIPO/Univentio  
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200402  
(c) 2004 Thomson Derwent  
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Set	Items	Description
S1	13523	AU=(OHTA, K? OR YAMAGATA, S? OR HARADA, T? OR MATSUMOTO, A? OR OHTA K? OR YAMAGATA S? OR HARADA T? OR MATSUMOTO A?)
S2	171	S1 AND IMAGE()PROCESS?/TI
S3	19	S2 AND ATTRIBUTE?
S4	6	S3 AND PRINT?

4/5,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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07256784 \*\*Image available\*\*

**IMAGE PROCESSOR AND CONTROL METHOD FOR THE IMAGE PROCESSOR**

PUB. NO.: 2002-125243 [JP 2002125243 A]  
PUBLISHED: April 26, 2002 (20020426)  
INVENTOR(s): **YAMAGATA SHIGEO**  
APPLICANT(s): CANON INC  
APPL. NO.: 2000-312956 [JP 2000312956]  
FILED: October 13, 2000 (20001013)  
INTL CLASS: H04N-009/79; G06T-001/00; G06T-005/00; H04N-001/60;  
H04N-001/407; H04N-001/46; H04N-005/76

**ABSTRACT**

PROBLEM TO BE SOLVED: To provide an image processor that can uniformize the color reproducibility of image data recorded on a recording medium independently of the color reproducibility of a **printer** that **prints** out the image data recorded on the recording medium.

SOLUTION: On the recording medium 1, an image data file, a control information file that applies **print** control to the image data file, and an image data correction information file that acts like **attribute** information for the image data file and corrects the image data are recorded. The image processor is characterized in that in the case of **printing** out the image file stored in the recording medium, a control section 11 controls a color adjustment section 4 to optimally correct the image data according to the **attribute** information file stored in the recording medium 11 for the **printout** of the image data.

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**IMAGE PROCESSOR AND CONTROL METHOD FOR THE IMAGE PROCESSOR**

INVENTOR(s): **YAMAGATA SHIGEO**

**ABSTRACT**

... of image data recorded on a recording medium independently of the color reproducibility of a **printer** that **prints** out the image data recorded on the recording medium.

SOLUTION: On the recording medium 1, an image data file, a control information file that applies **print** control to the image data file, and an image data correction information file that acts like **attribute** information for the image data file and corrects the image data are recorded. The image processor is characterized in that in the case of **printing** out the image file stored in the recording medium, a control section 11 controls a color adjustment section 4 to optimally correct the image data according to the **attribute** information file stored in the recording medium 11 for the **printout** of the image data.

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4/5,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06563230      \*\*Image available\*\*

**IMAGE      PROCESSING METHOD AND PROCESSOR,      PRINTER ,      IMAGE      PROCESSING  
SYSTEM AND STORAGE MEDIUM**

PUB. NO.:      2000-148973      [JP 2000148973      A]

PUBLISHED:      May 30, 2000 (20000530)

INVENTOR(s):      **MATSUMOTO ATSUSHI**

OTA KENICHI

APPLICANT(s):      CANON INC

APPL. NO.:      10-316726      [JP 98316726]

FILED:      November 06, 1998 (19981106)

INTL CLASS:      G06T-001/00; B41J-002/44; B41J-005/00; G06F-003/12;  
G06T-005/00; G06T-011/00; H04N-001/405; H04N-001/60;  
H04N-001/46

**ABSTRACT**

**PROBLEM TO BE SOLVED:** To realize appropriate data processing corresponding to the **attribute** of each image included in image data and to improve the quality of an output image when the image data is **printed** out.

**SOLUTION:** A rasterizer 14 generates a RGB bitmap image based on object data inputted from a **printer** driver 12 and stores it in an image memory 15. In such a case, the rasterizer 14 makes **attribute** information representing the **attribute** of the inputted object data correspond to each pixel of the generated bitmap image and stores it in an **attribute** map memory 16. An image processing part 17 converts the RGB bitmap image stored in the memory 15 into the binary bitmap data of each color of YMCK that can be processed by an image forming unit 19. In such a case, contents of conversion processing are switched, for instance, a dither matrix for binarization processing is switched based on the **attribute** information stored in the memory 16.

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**IMAGE      PROCESSING METHOD AND PROCESSOR,      PRINTER ,      IMAGE      PROCESSING  
SYSTEM AND STORAGE MEDIUM**

**INVENTOR(s):      MATSUMOTO ATSUSHI**

OTA KENICHI

**ABSTRACT**

**PROBLEM TO BE SOLVED:** To realize appropriate data processing corresponding to the **attribute** of each image included in image data and to improve the quality of an output image when the image data is **printed** out.

**SOLUTION:** A rasterizer 14 generates a RGB bitmap image based on object data inputted from a **printer** driver 12 and stores it in an image memory 15. In such a case, the rasterizer 14 makes **attribute** information representing the **attribute** of the inputted object data correspond to each pixel of the generated bitmap image and stores it in an **attribute** map memory 16. An image processing part 17 converts the RGB bitmap image stored in...

... are switched, for instance, a dither matrix for binarization processing is switched based on the **attribute** information stored in the memory 16.

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**4/5,K/3      (Item 3 from file: 347)**  
**DIALOG(R)File 347:JAPIO**

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05375865      \*\*Image available\*\*

**IMAGE PROCESSING UNIT AND ITS METHOD**

PUB. NO.:        08-331365 [JP 8331365 A]  
PUBLISHED:      December 13, 1996 (19961213)  
INVENTOR(s):    ARAI KOJI  
                 YAMAGATA SHIGEO  
                 MIKAMI FUMIO  
                 HARA KENJI  
                 MOTOYAMA EIICHI  
APPLICANT(s):   CANON INC [000100] (A Japanese Company or Corporation), JP  
                 (Japan)  
APPL. NO.:      07-134222 [JP 95134222]  
FILED:          May 31, 1995 (19950531)  
INTL CLASS:     [6] H04N-001/387; B41J-002/525; B41J-005/30; H04N-001/46  
JAPIO CLASS:    29.4 (PRECISION INSTRUMENTS -- Business Machines)  
JAPIO KEYWORD: R011 (LIQUID CRYSTALS); R105 (INFORMATION PROCESSING -- Ink  
                 Jet   **Printers** )

**ABSTRACT**

PURPOSE: To provide the image processing unit and its method in which natural color conversion processing is conducted even when a converted color and a nonconverted color are adjacent to each other via a gradation area.

CONSTITUTION: An arithmetic dimension discrimination device 103 compares plural **attributes** relating to colors such as hue, saturation, lightness between converted color data and conversion color data to be set respectively and provides an arithmetic object dimension signal representing an **attribute** with a maximum difference. A computing element 104 calculates input image data with converted color data based on the arithmetic object dimension signal to generate an area signal representing an area discrimination result and a cross color ratio signal deciding a cross color ratio of an original color and a conversion color. A computing element 105 calculates the original color data and the conversion color data based on the cross color ratio signal to generate cross color data. A selector 106 selects any of the input image data, the conversion color data and the cross color data based on the area signal and provides an output of the selected data.

**IMAGE PROCESSING UNIT AND ITS METHOD**

INVENTOR(s):    ARAI KOJI  
                 YAMAGATA SHIGEO  
                 MIKAMI FUMIO  
                 HARA KENJI  
                 MOTOYAMA EIICHI  
...JAPIO KEYWORD: Ink Jet   **Printers** )

**ABSTRACT**

...CONSTITUTION: An arithmetic dimension discrimination device 103 compares plural **attributes** relating to colors such as hue, saturation, lightness between converted color data and conversion color data to be set respectively and provides an arithmetic object dimension signal representing an **attribute** with a maximum difference. A computing element 104 calculates input image data with converted color...

4/5,K/4 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
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01552413

Image processing method and apparatus, computer program, and storage medium  
Bildverarbeitungsverfahren und -vorrichtung, Computerprogramm und Speichermedium  
Methode et dispositif de traitement d'image, programme d'ordinateur et moyen de stockage

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo, (JP), (Applicant designated States: all)

INVENTOR:

Nakayama, Tadayoshi, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko, Ohta-ku, Tokyo, (JP)  
Ohta, Ken-ichi, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko, Ohta-ku, Tokyo, (JP)  
Osawa, Hidefumi, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko, Ohta-ku, Tokyo, (JP)  
Kato, Shinichi, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko, Ohta-ku, Tokyo, (JP)  
Ito, Naoki, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko, Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick Court, High Holborn, London WC1R 5DH, (GB)

PATENT (CC, No, Kind, Date): EP 1292153 A2 030312 (Basic)

APPLICATION (CC, No, Date): EP 2002255970 020828;

PRIORITY (CC, No, Date): JP 2001259465 010829; JP 2001285682 010919; JP 20023894 020110

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04N-007/30

ABSTRACT EP 1292153 A2

This invention is designed to encode the image area information of a multilevel image within a target size without re-inputting the information. For this purpose, from the multilevel image data input from the input unit (101), an image area information generating unit (1701) generates, for each pixel, image area information constituted by an image area component indicating whether the pixel exists in a character line drawing area or halftone area and an image area component indicating whether the pixel is chromatic or achromatic. A lossless encoding unit (1705) encodes this information on a block basis, and stores the resultant information in a third memory (1709). An encoding control unit (1713) monitors an amount of code. Upon determining that the amount of code exceeds a target amount, the encoding control unit causes the lossless encoding unit (1705) to perform encoding upon changing image area components, of subsequently input image area components, which coincide with a condition. The codes that have already been stored in the third memory (1709) are temporarily decoded by a lossless code re-encoding unit (1715), and the above image area components are changed. The resultant data is then re-encoded and stored in the third memory (1709).

ABSTRACT WORD COUNT: 199

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 030312 A2 Published application without search report  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200311	8525
SPEC A	(English)	200311	33127
Total word count - document A			41652
Total word count - document B			0
Total word count - documents A + B			41652

Image processing method and apparatus, computer program, and storage medium

INVENTOR:

... JP)

Ohta, Ken-ichi, c/o Canon Kabushiki Kaisha ...

...SPECIFICATION image and black characters can be sharpened by using different types of black inks.

If **attribute** flag data, each consisting one bit and identifying a chromatic component, achromatic component, or character...

...be improved at the time of image output, and in particular, at the time of **printout**. The image area information includes information other than the above information.

To compress image information...

4/5,K/5 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01146343

Image processing method, system and apparatus, and storage medium  
Bildverarbeitungsverfahren, -system und -gerat, und Speichermedium  
Methode, systeme et appareil de traitement d'image, et moyen  
d'enregistrement

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (Applicant designated States: all)

INVENTOR:

Matsumoto, Atsushi, c/o Canon K.K., 30-2, 3-chome Shimomaruko, Ohta-ku,  
Tokyo, (JP)

Harada, Takuto, c/o Canon K.K., 30-2, 3-chome Shimomaruko, Ohta-ku,  
Tokyo, (JP)

Ohta, Ken-ichi, c/o Canon K.K., 30-2, 3-chome Shimomaruko, Ohta-ku,  
Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick  
Court, High Holborn, London WC1R 5DH, (GB)

PATENT (CC, No, Kind, Date): EP 999522 A2 000510 (Basic)  
EP 999522 A3 020814

APPLICATION (CC, No, Date): EP 99308834 991105;

PRIORITY (CC, No, Date): JP 98316725 981106; JP 98316726 981106; JP  
99305430 991027

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06T-011/00; H04N-001/40

ABSTRACT EP 999522 A2

A rasterizer generates bitmap images of RGB on the basis of object data inputted from a **printer** driver and stores the result in an image memory. The rasterizer brings **attribute** information representing **attributes** of the input object data into correspondence with each pixel of the generated bitmap images to store in an **attribute** map memory. An image processing unit converts RGB bitmap images stored in the image memory into binary bitmap data for each of YMCK colors which can be processed by an image forming unit. The contents of conversion processing such as dither matrix for binarization processing are switched on the basis of the **attribute** information retained in the **attribute** map memory.

ABSTRACT WORD COUNT: 114

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 000510 A2 Published application without search report  
Change: 020814 A2 International Patent Classification changed:  
20020624

Search Report: 020814 A3 Separate publication of the search report

Examination: 030319 A2 Date of request for examination: 20030109

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200019	1342
SPEC A	(English)	200019	9607
Total word count - document A			10949
Total word count - document B			0
Total word count - documents A + B			10949

Image processing **method, system and apparatus, and storage medium**

INVENTOR:

Matsumoto, Atsushi ...

...JP)

Harada, Takuto ...

...JP)

Ohta, Ken-ichi ...

...ABSTRACT rasterizer generates bitmap images of RGB on the basis of object data inputted from a **printer** driver and stores the result in an image memory. The rasterizer brings **attribute** information representing **attributes** of the input object data into correspondence with each pixel of the generated bitmap images to store in an **attribute** map memory. An image processing unit converts RGB bitmap images stored in the image memory...

...processing such as dither matrix for binarization processing are switched on the basis of the **attribute** information retained in the **attribute** map memory.

...SPECIFICATION there is known an image processing system for generating image data in digital form for **printing**. Such a system, shown in Fig. 1 is generally used. Fig. 1 is a block...

...Publishing) by using a host computer 101 to hardcopy output by using a laser beam **printer**, an ink jet **printer** or the like.

In Fig. 1, the reference numeral 102 denotes an application which operates...

...PageMaker(R) from Adobe Corporation. Digital documents prepared by these software are supplied to a **printer** driver 103 through an operating



system (OS) of a computer (not shown).  
The digital document...

...the like, which configure one page, and these commands are to be transmitted to the **printer** driver 103. A series of commands configuring a screen are represented by a language system...

...of such PDL, there are GDI(R), PS(R) (Post-Script) or the like.  
The **printer** driver 103 transfers the received PDL command to a rasterizer 105 within a raster image...

...the like expressed by the PDL command into a two-dimensional bitmap image for actually **printer** -outputting. Since the bitmap image becomes an image to completely fill a two-dimensional plane...

...document image 111 displayed on the host computer is transmitted to the rasterizer through the **printer** driver as a PDL command string 112, and the rasterizer develops the two-dimensional bitmap...

...106 as denoted by 113. The image data thus developed is transmitted to a color **printer** 107. The color **printer** 107 is provided with a known image forming unit 108 of the electrophotographic type or the ink jet recording type, which forms a visible image on a sheet for **print** -outputting. In this respect, the image data in an image memory 106 is transferred in...

...image forming unit 108 which is utilized for outputting will arise .  
For example, a color **printer** normally forms a color image on the basis of the so-called principle of subtractive...

...ratio. More specifically, the rasterizer must generate a bitmap image to be transmitted to the **printer** , after converting the color information which has been defined using R, G and B as...

...CMYK is, however, not uniquely determined, but the optimum converting method differs depending upon the **attribute** of a pattern defined by PDL. Referring to, for example, the example of Fig. 2...

...by 116 is a character (TEXT) image, and each of them has a respectively different **attribute** .

In a case where the color of TEXT of the character image 116 is defined

4/5,K/6 (Item 3 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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00603962

Image processing method and apparatus  
Gerat und Verfahren zur Bildverarbeitung  
Appareil et procede de traitement d'images  
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

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Niki, Toru, c/o CANON KABUSHIKI KAISHA, 30-2, 3-Chome Shimomaruko,  
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Saito, Kazuyuki, c/o CANON KABUSHIKI KAISHA, 30-2, 3-Chome Shimomaruko,

Ohta-ku, Tokyo, (JP)  
**Matsumoto, Akihiro, c/o CANON KABUSHIKI KAISHA**, 30-2, 3-Chome  
 Shimomaruko, Ohta-ku, Tokyo, (JP)  
 LEGAL REPRESENTATIVE:  
 Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. High Holborn  
 2-5 Warwick Court, London WC1R 5DJ, (GB)  
 PATENT (CC, No, Kind, Date): EP 606780 A2 940720 (Basic)  
 EP 606780 A3 950118  
 EP 606780 B1 010711  
 APPLICATION (CC, No, Date): EP 93310637 931231;  
 PRIORITY (CC, No, Date): JP 932696 930111; JP 936034 930118  
 DESIGNATED STATES: DE; FR; GB  
 RELATED DIVISIONAL NUMBER(S) - PN (AN):  
 EP 898240 (EP 98203750)  
 INTERNATIONAL PATENT CLASS: G06K-009/32  
 CITED REFERENCES (EP B):  
 PATTERN RECOGNITION., vol.23, no.11, November 1990, OXFORD, GB pages 1141  
 - 1154, XP000160004 T. AKIYAMA & N. HAGITA 'automated entry system for  
 printed documents'  
 9TH INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION, NOVEMBER 1988, ROME,  
 IT pages 425 - 429, XP000013013 K. KISE ET AL. 'VISITING CARD  
 UNDERSTANDING SYSTEM'  
 10TH INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION, JUNE 1990, ATLANTIC  
 CITY, USA pages 551 - 556, XP000166354 S. TSUJIMOTO & H. ASADA  
 'Understanding Multi-articled Documents';

ABSTRACT EP 606780 A2

Image processing method and apparatus are provided. Image information  
 is inputted. The input image information is divided into a plurality of  
 areas. Radial line segments are extended in upper, lower, left, and right  
 directions from a point in an arbitrary notice area in the divided areas  
 and connection information between the line segments and the input image  
 is detected. Characteristics of the notice area are discriminated in  
 accordance with the connection information detected. The connection  
 information of the areas is a relative position of each area. The image  
 information is dot information. The characteristics to be discriminated  
 are such that the image information of the area is a headline. (see image  
 in original document)

ABSTRACT WORD COUNT: 116

NOTE:

Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant: 010711 B1 Granted patent  
 Application: 940720 A2 Published application (A1with Search Report  
 ;A2without Search Report)  
 Oppn None: 020703 B1 No opposition filed: 20020412  
 Search Report: 950118 A3 Separate publication of the European or  
 International search report  
 Examination: 950802 A2 Date of filing of request for examination:  
 950606  
 Examination: 990317 A2 Date of despatch of first examination report:  
 990202

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	700
CLAIMS B	(English)	200128	660
CLAIMS B	(German)	200128	611
CLAIMS B	(French)	200128	821
SPEC A	(English)	EPABF2	15364

SPEC B (English) 200128 15350  
Total word count - document A 16065  
Total word count - document B 17442  
Total word count - documents A + B 33507

Image processing method and apparatus  
INVENTOR:

... JP)

Matsumoto, Akihiro, c/o CANON KABUSHIKI KAISHA ...

...SPECIFICATION to image processing method and apparatus for reading a document image and identifying position and **attributes** of the document.

#### Related Background Art

A flow of processes of a conventional optical character...

...horizontal type-setting document exist in documents of Japanese, it is necessary to decide an **attribute** regarding the vertical or horizontal type-setting, namely, type-setting direction before a character extracting...

...also designates the order of each rectangle or the relation with the headline thereof as **attributes** of the rectangle.

Hitherto, as a method of dividing the area of a table from...

...to the invention, by executing processes for dividing an input image into rectangle areas every **attribute** such as figure, photograph, table, separator, or the like, for extending radial line segments from of Figs. 5A and 5B showing flowcharts of an **attribute** detecting process for detecting **attributes** of a separator and the like by a size of rectangle;

Fig. 6 is a diagram showing the division by a density D and an area S of the **attributes** of a rectangle (area);

Fig. 7 is a flowchart showing processes of a type-setting...

...labeling pixels which were thinned out and also for making initial rectangle data; 108 an **attribute** detector for detecting **attributes** in an area of a separator, table, figure, or the like; 109 a type-setting... are executed hereinbelow in a manner similar to the above method.

#### Step S204

In the **attribute** detector 108, after completion of the labeling and the tracing of the rectangle, the **attributes** of the rectangles such as rectangle corresponding to the body, rectangle corresponding to the figure...

File 2:INSPEC 1969-2004/Jan W1  
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File 6:NTIS 1964-2004/Jan W2  
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File 8:Ei Compendex(R) 1970-2004/Jan W1  
(c) 2004 Elsevier Eng. Info. Inc.  
File 34:SciSearch(R) Cited Ref Sci 1990-2004/Jan W1  
(c) 2004 Inst for Sci Info  
File 35:Dissertation Abs Online 1861-2003/Nov  
(c) 2003 ProQuest Info&Learning  
File 65:Inside Conferences 1993-2004/Jan W2  
(c) 2004 BLDSC all rts. reserv.  
File 94:JICST-EPlus 1985-2004/Jan W1  
(c)2004 Japan Science and Tech Corp(JST)  
File 95:TEME-Technology & Management 1989-2004/Dec W3  
(c) 2004 FIZ TECHNIK  
File 99:Wilson Appl. Sci & Tech Abs 1983-2003/Nov  
(c) 2003 The HW Wilson Co.  
File 144:Pascal 1973-2003/Dec W2  
(c) 2003 INIST/CNRS  
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep  
(c) 2003 EBSCO Pub.  
File 239:Mathsci 1940-2003/Feb  
(c) 2003 American Mathematical Society  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 The Gale Group  
File 603:Newspaper Abstracts 1984-1988  
(c)2001 ProQuest Info&Learning  
File 483:Newspaper Abs Daily 1986-2004/Jan 10  
(c) 2004 ProQuest Info&Learning  
File 248:PIRA 1975-2003/Dec W3  
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Set	Items	Description
S1	4240	BITMAP?? OR BIT()MAP??
S2	2061	VECTOR?(3N)GRAPHIC?
S3	1034758	2D OR (TWO OR 2)()DIMENSION? OR RASTER?
S4	25	RENDER? AND OBJECT?? AND S1
S5	9064	RGB OR RED()GREEN()BLUE
S6	438573	(IMAG? OR DITHER?) (3N)PROCESS?
S7	851835	(BINARIZATION OR FILTER? OR BLACK()CHARACTER?()EXTRACT? OR ERROR()DIFFUSION)
S8	23	(UCR OR UNDER() (COLOR OR COLOUR) ()REMOVAL) (3N)PROCESS?
S9	637521	(DETERMIN? OR DISCERN? OR DETECT? OR EVALUAT?) AND (S1 OR - S2 OR MONOCHROME? OR IMAG?? OR CHARACTER??)
S10	3114048	ATTRIBUT? OR COLOUR? OR COLOR? OR VECTOR? OR CHARACTER??
S11	27542	(OVERLAP? OR OVER()LAP? OR OVERLAY? OR OVER()LAY?) AND (IM-AGE?? OR PICTURE? OR PHOTOS OR PHOTO OR GRAPHIC??)
S12	125733	PIXEL?? OR PICTURE()ELEMENT? OR PEL
S13	252351	(RESOLUTION OR TONE??) AND (MODIF? OR CHANG? OR CONVERT? OR CONVERS? OR ALTER? OR ADJUST?)
S14	14012	S12 AND (POSITION? OR PLACEMENT? OR LOCATION?)
S15	27003	AU=(OHTA, K? OR YAMAGATA, S? OR HARADA, T? OR MATSUMOTO, A? OR OHTA K? OR YAMAGATA S? OR HARADA T? OR MATSUMOTO A?)
S16	2	S4 AND PRINT?
S17	2	RD S16 (unique items)
S18	161431	S9 AND (S6 OR S7 OR S8)
S19	2541	S18 AND S14

S20	144	S19 AND S13
S21	6	S20 AND PRINT?
S22	6	S21 NOT S16
S23	5	RD S22 (unique items)
S24	4823	S10 AND S11
S25	93	S24 AND S5
S26	21	S25 AND S12
S27	21	S26 NOT (S21 OR S16)
S28	13	S27 AND PY=2000:2004
S29	8	S27 NOT S28
S30	7	RD S29 (unique items)
S31	0	S4 AND S5
S32	1407	S9 AND S10 AND S11
S33	209	S32 AND S12
S34	12	S33 AND S13
S35	12	S34 NOT (S26 OR S21 OR S16)
S36	9	S35 AND PY=2000:2004
S37	3	S35 NOT S36
S38	2	RD S37 (unique items)
S39	0	S15 AND S1 AND S2
S40	443	S15 AND (S6 OR S7)
S41	0	S40 AND S1
S42	17	S40 AND PRINT?
S43	17	S42 NOT (S34 OR S26 OR S21 OR S16)
S44	13	RD S43 (unique items)

17/3,K/1 (Item 1 from file: 233)  
DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00543127 99PU08-005

**CorelDraw 9**

McClelland, Deke  
Publish , August 1, 1999 , v14 n8 p39-40, 2 Page(s)  
ISSN: 0897-6007  
Company Name: Corel Systems  
URL: <http://www.corel.com>  
Product Name: CorelDraw 9

... 613, 800). Notes that this upgrade takes on the fundamentals, including beefed up capabilities for **printing** and PostScript file export. States that if a document contains imported **bitmaps** , the new Link Manager can organize links and embed images and the **Print** Command runs a check to make sure links and other output affairs are in order...

...greater control over PDF creation and in addition to embedding fonts and compressing images, can **render** complex fills as **bitmaps** and specify the number of gradations. Notes that for all its advantages, there are still...

Descriptors: Drawing; **Object** Linking and Embedding; Paint Program; Image Processing; Upgrade; Compression; Graphics

17/3,K/2 (Item 2 from file: 233)  
DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00423067 96WN05-014

**Artful CAD renders 3-D: CorelCAD**

Morgan, Cynthia  
Windows Magazine , May 1, 1996 , v7 n5 p124, 1 Page(s)  
ISSN: 060-1066  
Company Name: Corel  
Product Name: CorelCAD

**Artful CAD renders 3-D: CorelCAD**

... Explains that this drafting program emphasizes three-dimensional illustration, and it enables you to wrap **bitmaps** around **objects** , control eight light sources, and specify the degree to which one **object** reflects other **objects** in the scene. Claims that CorelCAD has the power to let you build your design in layers, which can be made invisible, **printed** separately, or protected against modification. Says CorelCAD has solid modeling tools and extensive dimensioning tools...

?

23/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

6604891 INSPEC Abstract Number: C2000-07-5260B-134

**Title: Digital halftoning optimisation via genetic algorithms for ink jet device**

Author(s): Alander, J.T.; Mantere, T.; Pyylampi, T.

Author Affiliation: Dept. of Inf. Technol. & Production Econ., Vaasa Univ., Finland

Conference Title: Development in Computational Mechanics with High Performance Computing. Third Euro-Conference on Parallel and Distributed Computing for Computational Mechanics p.211-16

Editor(s): Topping, B.H.V.

Publisher: Civil-Comp Press, Edinburgh, UK

Publication Date: 1999 Country of Publication: UK v+269 pp.

ISBN: 0 948749 59 8 Material Identity Number: XX-2000-00890

Conference Title: Developments in Computational Mechanics with High Performance Computing. Third Euro-Conference on Parallel and Distributed Computing for Computational Mechanics

Conference Date: 20-25 March 1999 Conference Location: Weimer, Germany

Language: English

Subfile: C

Copyright 2000, IEE

Abstract: Digital halftoning is a method used to **convert** continuous **tone images** into **images** with a limited number of **tones**, usually only two: black and white. In this work digital halftoning methods were applied to very low- **resolution** ink jet marking machines. The main problem is to do the halftoning so that the bi-level result **image** does not contain artefacts, such as moire, lines or clusters, caused by dot **placement**. The main optimisation problem is that the average density of the dot pattern should interpolate as precisely the original **image pixel** values as possible. Also the dot pattern spectrum should be skewed towards high frequencies (blue...

... construct the fitness function for genetic algorithm optimisation. Several fitness function components were tested and **evaluated** in order to achieve a satisfactory optimisation result. A threshold matrix optimisation program was programmed in C-language and the resulting threshold matrices were tested with the Khoros **image processing** system. After **evaluation**, the best threshold matrices were selected and tested in a real ink-jet marking device.

...Descriptors: **image resolution** ; ...

...ink jet **printers** ;

...Identifiers: very low- **resolution** machines...

...bi-level **image** ; ...

...dot **placement** ; ...

... **image pixel** values...

...Khoros **image processing** system

23/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

5318296 INSPEC Abstract Number: B9608-2210D-021, C9608-3355F-011

**Title: Sensor and control electronics for an industrial 3D laser scanner**

Author(s): Asjes, R.J.; Kooijman, K.S.; Vermeulen, O.T.J.A.; Duijve, R.

Author Affiliation: Dept. of Meas. & Inspection, Philips Centre for Manuf. Technol., Eindhoven, Netherlands

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)

vol.2599 p.171-6

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 1996 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(1996)2599L:171:SCEI;1-8

Material Identity Number: C574-96048

U.S. Copyright Clearance Center Code: 0 8194 1963 X/96/\$6.00

Conference Title: Three-Dimensional and Unconventional Imaging for Industrial Inspection and Metrology

Conference Sponsor: SPIE

Conference Date: 23-25 Oct. 1995 Conference Location: Philadelphia, PA, USA

Language: English

Subfile: B C

Copyright 1996, IEE

...Abstract: for the product type by the flexibility of scan speed (more than 1000 scans/sec), **resolution** (up to 20000 **pixels** /scan line) and data rate (up to 10\*10/sup 6/ samples/sec). Sensor electronics involve customized **position** sensing **detectors** and low noise high speed amplifiers. Analogue preprocessing of the PSD signals guarantee a large...

... realize a precision synchronization of the PCB transport and an extremely stable but fast pullable **pixel** clock to the rotating polygon mirror. Modular parallel **image processing** is performed to produce data of the solder deposits such as volume, area, height, registration...

...Descriptors: **image processing** equipment...

... **image** sensors...

... **printed** circuit manufacture...

... **printed** circuit testing

...Identifiers: customized **position** sensing **detectors** ; ...

...fast pullable **pixel** clock...

...modular parallel **image processing** ; ...

...logarithmic **conversion** ; ...

...screen **printer** stencil

23/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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5080162 INSPEC Abstract Number: C9511-6130B-089

**Title: Edge preservation with space-filling curve half-toning**

Author(s): Buchanan, J.W.; Verevka, O.

Author Affiliation: Dept. of Comput. Sci., Alberta Univ., Edmonton, Alta., Canada

Conference Title: Proceedings Graphics Interface '95 p.75-82



Editor(s): Davis, W.A.; Prusinkiewicz, P.  
Publisher: Canadian Inf. Process. Soc, Toronto, Ont., Canada  
Publication Date: 1995 Country of Publication: Canada viii+281 pp.  
ISBN: 0 9695338 4 5  
Conference Title: Proceedings of Graphics/Vision Interface '95  
Conference Date: 17-19 May 1995 Conference Location: Quebec, Que.,  
Canada  
Language: English  
Subfile: C  
Copyright 1995, IEE

Abstract: Accurately displaying a grey-scale **image** on a **printer** requires that the **image** be half- **toned** . That is, the **image** is approximated by sets of white and black **pixels** whose local average intensity is similar to that of the original **image** . In the case of laser **printers** these black and white **pixels** should be clustered because **pixels** cannot be set independently. By using a space-filling curve it is possible to develop clustered sets of **pixels** that approximate the **image** . Unfortunately this technique can destroy the edges in the resulting **image** . We present two solutions to the edge destruction problem. The first solution uses an edge **detection filter** to **determine** when the region size should be **changed** . By ensuring that none of the regions cross an edge the resulting **image** will contain a good representation of the edges. The second solution uses a local sort of the region in order to **determine** where the black and white **pixels** are placed. When the regions are small the resulting black and white **pixels** are still clustered but are **positioned** in such a way that edges are highlighted.

...Descriptors: edge **detection** ; ...

... **printers**

...Identifiers: grey-scale **image** ; ...

... **printer** ; ...

...black **pixels** ; ...

...white **pixels** ; ...

...laser **printers** ; ...

... **image** approximation...

...edge **detection filter** ;

23/3,K/4 (Item 1 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
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01736391 20030205328

**3-D measurement of shape and strain of sheet metal in press forming in high resolution by fourier phase correlation method**

Sakamoto, M; Sawada, T

Tokyo Univ. of Agriculture a. Technol., J

Advanced Technology of Plasticity 2002, Proc. of the 7th ICPT Internat.

Conf. on Technol. of Plasticity, Vol.2, Yokohama, J, Oct 27-Nov 1, 20022002

Document type: Conference paper Language: English

Record type: Abstract

**3-D measurement of shape and strain of sheet metal in press forming in high resolution by fourier phase correlation method**

ABSTRACT:

...investigated. Recently, some methods of non-contact strain measurement in three dimensions by using an **image** sensing camera system were developed. All of them **change** the brightness of the **images** taken from the marks of the specimen by the camera into the binary signals. It...

...method is developed for sheet metal products in press forming on which circle marks are **printed**. This method is effective for **detecting** the marks under the uneven illumination without **processing** troublesomely the **images** and therefore leads to a high **resolution**. In addition, the new method of applying the spline interpolation to **position** the observed marks in the range of sub- **pixel** is proposed. The Fourier phase correlation method and the parametric spline interpolation are applied to

...  
DESCRIPTORS: MEASUREMENT **RESOLUTION** ; CONTACTLESS MEASUREMENT; SHEET METALS; METAL PRESSING; ELONGATION; SHAPE; COMPRESSION MOLDING; BRIGHTNESS; EMBOSSING; SPLINE FUNCTION

23/3,K/5 (Item 2 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management  
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00783925 E94064418026

**I/O pin solder point inspection system**

(Ein automatisches Pruefsystem fuer geloetete I/O-Pins)

Koezuka, T; Suto, Y; Ando, M

Fujitsu Lab., Atsugi, J

14th IEEE/CHMT Int. Electronics Manufacturing Technol. (IEMT) Symp., Proc., Kanazawa, Japan, Jun 9-11, 19931993

Document type: Conference paper Language: English

Record type: Abstract

ISBN: 0-7803-1433-6

ABSTRACT:

An automated inspection system was developed that feature perpendicular and variable-intensity lighting for **image** contrast enhancement and improved sensing accuracy a high- **resolution** camera with reflection-adaptive **binarization** for improved **image processing**, and an adaptive inspection algorithm that **modifies** its defect definition criteria according to target **position** quickly, accurately, and reliably inspect highly dense arrays of perpendicular I/O pins soldered onto a ceramic **printed** wiring board (PWB). The system' s Mega-Scope, a high- **resolution**, eight-bit gray-scale CCO camera, **images** a 2048x2048- **pixel** area with a 10 micron **resolution** in 4 seconds, taking 60 I/O pin **images** at a time. The total time to inspect the **position** and solder fillet condition of more than eight thousand I/O pins is just 30...

...DESCRIPTORS: AUTOMATIC TEST SYSTEM; ACCURACY; COMPUTERISED PICTURE PROCESSING; RELIABILITY; MANUFACTURING TECHNIQUE; SEMICONDUCTOR TECHNOLOGY; CCD **IMAGE** SENSORS; **RESOLUTION** ; DEFECT **DETECTION**

?

30/3,K/1 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

4878043 INSPEC Abstract Number: B9503-7260-017

**Title:** Picture quality of different pixel arrangements for large-sized matrix displays

Author(s): Hara, Z.; Terazaki, N.; Shiramatsu, N.; Iwata, S.  
Author Affiliation: Mitsubishi Electr. Corp., Nagasaki, Japan  
Journal: Electronics and Communications in Japan, Part 2 (Electronics)  
vol.77, no.7 p.105-18  
Publication Date: July 1994 Country of Publication: USA  
CODEN: ECJEEJ ISSN: 8756-663X  
U.S. Copyright Clearance Center Code: 8756-663X/94/0007-0105  
Language: English  
Subfile: B  
Copyright 1995, IEE

**Title:** Picture quality of different pixel arrangements for large-sized matrix displays

**Abstract:** The image information theory is introduced to the study of pixel arrangement for flat displays which has been based mainly on subjective evaluation tests. The objective is to make a theoretical elucidation of the relations between different pixel arrangements-particularly pixel arrangements of light-emissive elements for large-sized matrix displays-and picture quality. First, the factors determining picture quality are identified using a picture model incorporating the sampling of the original picture. As a result, the Nyquist limits are shown to be essential. Second, the Nyquist limits of different pixel arrangements are evaluated. The areas surrounded by the Nyquist limits are shown to consist of colored and discolored regions. This observation is used to relate the Nyquist limits to visual limits and picture quality. Third, the picture quality of typical pixel arrangements for large-sized matrix displays is examined. The quality of still and motion pictures displayed by the RGB-trio and RGGB-mosaic arrangements are compared by means of subjective evaluation tests and three dimensional spectrum analysis. The comparative analysis gives the following conclusions: (1) In displaying still pictures, the RGGB-mosaic arrangement has the effective number of pixels about twice the real number of pixels because of the overlaps of adjacent pixels, but the RGB-trio does not have this effect. (2) In displaying motion pictures, the RGGB-mosaic arrangement provides better picture quality than in the case of still pictures but the RGB-trio arrangement does not.

Identifiers: pixel arrangements...

... image information theory...

... picture quality...

... picture model...

... colored regions...

... RGB-trio...

...still pictures

30/3,K/2 (Item 2 from file: 2)  
DIALOG(R)File 2:INSPEC  
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03372409 INSPEC Abstract Number: C89033542

**Title: QuickDraw data structures for image processing**

Author(s): LaPotin, P.J.; McKim, H.L.

Author Affiliation: Dept. of Phys. & Astron., Dartmouth Coll., Hanover, NH, USA

Conference Title: GIS/LIS '88 Proceedings: Accessing the World. Third International Conference, Exhibits and Workshops p.35-51

Publisher: American Soc. Photogrammetry & Remote Sensing, Falls Church, VA, USA

Publication Date: 1988 Country of Publication: USA 2 vol. xvi+980 pp. p.vol.1

Conference Sponsor: American Congress on Surveying & Mapping; American Soc. Photogrammetry & Remote Sensing; Assoc. American Geographers; URISA

Conference Date: 30 Nov.-2 Dec. 1988 Conference Location: San Antonio, TX, USA

Language: English

Subfile: C

**Title: QuickDraw data structures for image processing**

...Abstract: method for converting binary information into Mac QuickDraw operating codes is investigated. The technique converts **pixels** of variable gray scale (usually 0-255) into scaled **RGB** intensities. The scaled intensities are stored within a **pixel** map that contains information on the base address of where the information may be retrieved ...

...on the size, horizontal and vertical resolution, and planar offsets (for greater than 8-bit **color** ). In the developed prototype, **pictures** are referred to by their handle in memory (pointers to master pointers that point to the **picture0** data structure in memory). They are needed to quickly pull large volumes of information from memory in the **image** display process. They are needed for the design of efficient and dynamic data structures to display, **overlay** , and analyze large scenes in multiple windows (GrafPorts). GrafPorts are the 'logical paper' required to display **images** in windows, dialogs, and most output devices. GrafPorts that contain **pixel** maps may be quickly converted to their **vector** equivalent using standard **picture** data structures and 'off-the-shelf' bit transfer routines.

...Descriptors: computer **graphics** ;

Identifiers: **picture** handles...

...multiple **overlapping** windows...

... **image** processing...

...scaled **RGB** intensities...

... **picture** data structures

30/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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03306239 INSPEC Abstract Number: C89013399

**Title: A microcode implementation of imaging and graphics on a color imaging engine**

Author(s): Butler, T.

Author Affiliation: Visual Inf. Technol. Inc., Plano, TX, USA

Conference Title: Electronic Imaging '88. International Electronic

Imaging Exposition and Conference. Advance Printing of Paper Summaries  
p.105-9 vol.1

Publisher: Inst. Graphic Commun, Boston, MA, USA

Publication Date: 1988 Country of Publication: USA 2 vol. xxix+950  
pp.

Conference Sponsor: Diagnostic Imaging Magazine; ESD: Electron. Syst.  
Design Magazine; EP & P 88 Magazine; Adv. Imaging Magazine

Conference Date: 28-31 March 1988 Conference Location: Anaheim, CA,  
USA

Language: English

Subfile: C

**Title: A microcode implementation of imaging and graphics on a color  
imaging engine**

**Abstract:** High-level imaging and **graphics** features are available in  
several microcode programs running on a new 172 MIPS **color image**  
computing engine. The hardware environment includes a SUN host, a 32-bit  
addressing unit, four 64-bit custom VLSI parallel **image** processors, and  
10 Mbytes of dual-ported **image** memory. A typical configuration provides  
1280\*2048\*24-bit **RGB pixels** plus an 8-bit **overlay**. The microcode  
programs include: 2D raster scan, 2D point operation, 2D line scan, 3D  
rendering...

**Descriptors:** **colour ; ...**

**...computer graphic equipment...**

**...computer graphics ; ...**

**...computerised picture processing**

**Identifiers: graphics ; ...**

**... color imaging engine...**

**...custom VLSI parallel image processors...**

**...dual-ported image memory...**

**... RGB pixels ; ...**

**...8-bit overlay ; ...**

**...1280 pixel ; ...**

**...2084 pixel ;**

**30/3,K/4 (Item 1 from file: 34)**

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

07348864 Genuine Article#: 154DK No. References: 29

**Title: Complete chromogen separation and analysis in double  
immunohistochemical stains using Photoshop-based image analysis**

**Author(s):** Lehr HA (REPRINT) ; vanderLoos CM; Teeling P; Gown AM

**Corporate Source:** UNIV MAINZ,MED CTR, INST PATHOL, LANGENBECKSTR 1/D-55101

MAINZ//GERMANY/ (REPRINT); UNIV AMSTERDAM,DEPT CARDIOVASC

PATHOL/AMSTERDAM//NETHERLANDS//; PHENOPATH LABS,/SEATTLE//WA/;

IMMUNOCYTOCHEM RES INST SEATTLE,/SEATTLE//WA/

**Journal:** JOURNAL OF HISTOCHEMISTRY & CYTOCHEMISTRY, 1999, V47, N1 (JAN), P  
119-125

ISSN: 0022-1554 Publication date: 19990100  
Publisher: HISTOCHEMICAL SOC INC, UNIV WASHINGTON, DEPT BIOSTRUCTURE, BOX  
357420, SEATTLE, WA 98195  
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

**Title: Complete chromogen separation and analysis in double**

**immunohistochemical stains using Photoshop-based image analysis**

...Abstract: tissues can be accomplished by double immunohistochemistry. However, many double chromogen systems suffer from signal **overlap**, precluding definite signal quantification. To separate and quantitatively analyze the different chromogens, we imported **images** into a Macintosh computer using a CCD camera attached to a diagnostic microscope and used Photoshop software for the recognition, selection, and separation of **colors**. We show here that Photoshop-based **image** analysis allows complete separation of chromogens not only on the basis of their **RGB** spectral characteristics, but also on the basis of information concerning saturation, hue, and luminosity intrinsic to the digitized **images**. We demonstrate that Photoshop-based **image** analysis provides superior results compared to **color** separation using bandpass filters. Quantification of the individual chromogens is then provided by Photoshop using...

...command, which supplies information on the luminosity (corresponding to gray levels of black-and-white **images**) and on the number of **pixels** as a measure of spatial distribution.

30/3,K/5 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00303109 93AW02-004

**Devices & desires -- Whether or not you're a fan of P. D. James, you'll appreciate Inspector Leemon's detective work as he unravels the mystery of**

...

Leemon, Sheldon

AmigaWorld, February 1, 1993, v9 n2 p30-38, 8 Page(s)

ISSN: 0883-2390

Presents a buyer's guide reviewing 13 **graphics** boards for the Amiga. Features a table comparing the 10 available boards in 13 categories, including video standard, composite or **RGB** output type, horizontal scan rate, number of **colors** available, and maximum **pixel** resolution. Notes the photograph-like clarity of many of these display cards due to their very high **color** resolution. Discusses the two types of boards, one using the enhanced display as a separate...

... the other involving connecting the enhanced display to the normal Amiga display so as to **overlay** normal Amiga **graphics** over the enhanced display. Also covers the issue of animation in choosing a board. Includes

...

Descriptors: **Graphics**; Board; Video Display; Vendor Guide; Hardware Review

30/3,K/6 (Item 2 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.  
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00192897 89IW05-012

**Product captures 16-Bit color images in real time**  
Pane, Patricia J  
InfoWorld , May 1, 1989 , v11 n18 p27, 1 Pages  
ISSN: 0199-6649

**Product captures 16-Bit color images in real time**  
Reports that Data Translation of Marlboro, MA (508) announced the release of **Color Capture** (\$3,495), a **color** frame-grabber board and software for IBM PS/2 Micro Channel Architecture models that captures 16-bit **images** from any **RGB** video source in real time. Its **image** files need either a 16-bit or 24-bit TIFF formats for video **images** . Uses 32,768 **colors** in a resolution of 640 by 480 **pixels** . Lets users display continuous, live video **images** . Includes a Freeze Frame mode, allows **image** zooming, panning and scrolling, and a programmable **overlay** memory that allows text and **graphics** to be placed anywhere in an **image** . An optional video cable lists for \$125. Contains one **photo** . (rqe)  
Descriptors: Video Controller; Interactive Video; Expansion Board; Software; **Image** Processing  
Identifiers: **Color** Capture; Data Translation

30/3,K/7 (Item 1 from file: 248)  
DIALOG(R)File 248:PIRA  
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00083061 Pira Acc. Num.: 40809131

**Title: APPARATUS FOR COMBINING A VIDEO SIGNAL WITH GRAPHICS AND TEXT FROM A COMPUTER**

Authors: Stell Douglas  
Patent Assignee: DIGITAL EQUIPMENT CORPORATION  
Patent Number: US 4498098  
Application Date: 850205  
Document Type: Patent  
Language: unspecified

**Title: APPARATUS FOR COMBINING A VIDEO SIGNAL WITH GRAPHICS AND TEXT FROM A COMPUTER**

...Abstract: video signals from a video source, such as a video disc player, with computer-generated **graphics** /text output on a single display, for **overlaying** the two. The computer-generated video is provided in **RGB** format; the other video is converted to **RGB** format if not already in that form and the two sets of **RGB** signals are provided to a switch. The switch (i.e., multiplexer) selects which one of the two **RGB** signal sets to display; this selection is made separately for each **pixel** . In one embodiment, the **color** of the computer-generated signals controls the switch's selection of source. A master-slave synchronization system maintains registration between the two sets of **RGB** signals. When the video source is unstable (as, for example, with a video disc player...

... locks the video switch, display and computer video generator to the timing of the video **image** source (such as video disc player). Thus, the rest of the system tracks the jitter...

?

38/3,K/1 (Item 1 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05349128 E.I. No: EIP99094766950

**Title:** Automatic determination of imperviousness in urban areas from digital orthophotos

Author: Fankhauser, R.

Corporate Source: Swiss Federal Inst for Environmental Science and Technology (EAWAG), Duebendorf, Switz

Conference Title: Proceedings of the 1998 4th International Conference on Developments in Urban Drainage Modelling (UDM-98)

Conference Location: London, UK Conference Date: 19980921-19980924

E.I. Conference No.: 55350

Source: Water Science and Technology v 39 n 9 1999. p 81-86

Publication Year: 1999

CODEN: WSTED4 ISSN: 0273-1223

Language: English

**Title:** Automatic determination of imperviousness in urban areas from digital orthophotos

**Abstract:** Determination of impervious areas in urban regions is the most labour-intensive part of data acquisition for rainfall-runoff modelling in urban hydrology. This paper presents an automatic determination method of imperviousness from aerial photographs. The colour, CIR (colour infrared) aerial photographs and orthophotos used have a ground resolution of 25 to 75 centimetres. A maximum likelihood classification algorithm was applied to assign each pixel to a surface category. Classification results were then overlaid with the subcatchments to determine the imperviousness of each subcatchment. Classification and overlay were carried out with the raster-based GIS IDRISI. The method was tested on various...

...within 10%. The deviations for individual subcatchments were much higher. Equivalent results were obtained for colour and CIR photographs. A combination of both spectral ranges resulted only in a slight improvement. Consequently, this does not justify the additional costs of the second image. The developed method is an interesting alternative for use on large catchment areas where manual digitization is very time-consuming and, thus...

Descriptors: Hydrology; Rain; Runoff; Mathematical models; Photogrammetry; Image analysis; Pattern recognition; Maximum likelihood estimation; Algorithms; Infrared imaging

38/3,K/2 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
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01605158 ORDER NO: AAD98-07279

**AUTOMATIC TARGET RECOGNITION USING VECTOR QUANTIZATION AND NEURAL NETWORKS**

Author: CHAN, LIPCHEN ALEX

Degree: PH.D.

Year: 1997

Corporate Source/Institution: STATE UNIVERSITY OF NEW YORK AT BUFFALO (0656)

Source: VOLUME 58/08-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 4362. 220 PAGES



## **AUTOMATIC TARGET RECOGNITION USING VECTOR QUANTIZATION AND NEURAL NETWORKS**

...classifying military targets obtained with forward-looking infrared (FLIR) sensors. These ATR modules include various **vector** quantizers (VQs), neural networks, and synthetic discriminant function (SDF) filters. Specialized aspect windows are used to clip away unwanted background **pixels** in each input **image**. After a smooth enlargement, the extracted areas are then either divided into **overlapping** blocks in the spatial domain, decomposed into several subbands via a wavelet method, or reduced ...

...represent a particular piece of input information. These templates are then further trained by a **modified** learning **vector** quantization (LVQ) algorithm that enhances their discriminatory characteristics. Outputs of the VQ codebooks can be...

...tolerable degradation in recognition rate. Our path selector consists of a set of most representative **images** (MRIs), one for each processing path. These MRIs are generated through the K-means and...

...LVQ training processes. In addition, SDF filters are designed and tested for their applicability to **detecting** and classifying military targets in sequences of FLIR **images** at a very low **resolution**. Promising results are obtained from the wavelet-based VQ classifier and the SDF **detector**.  
?

Author(s): Sasaki, H.; **Harada, T.** ; Kuriyama, T.

...Abstract: power-terminal VLSIs to suppress strong radiated emissions caused by power plane resonance of multilayer **printed** circuit boards (PCBs). This circuit is based on a previous pi -network **filter** consisting of two capacitors and one power trace. The power trace, designed in agreement with...

...theory, was used in place of the ferrite bead inductor of a conventional pi -network **filter** . The new circuit has been so designed that when a number of them are applied...

...Descriptors: **printed** circuit layout

...Identifiers: multilayer **printed** circuit boards...

...pi -network **filter** ;

**44/3,K/3** (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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04067327 INSPEC Abstract Number: B9202-2210D-093, C9202-3355F-038

**Title: A printed circuit board (PCB) inspection system employing the multi-lighting optical system**

Author(s): Kishimoto, S.; Kakimori, N.; Yamamoto, Y.; Takahashi, Y.; **Harada, T.** ; Iwata, Y.; Shigeyama, Y.; Nakao, T.

Author Affiliation: Sharp Corp., Nara, Japan

Conference Title: 8th IEMT 1990. International Electronic Manufacturing Technology Symposium (Cat. No.90CH2833-2) p.120-9

Publisher: IEEE, New York, NY, USA

Publication Date: 1990 Country of Publication: USA viii+515 pp.

U.S. Copyright Clearance Center Code: CH2833-2/90/0000-0120\$01.00

Conference Sponsor: IEEE

Conference Date: 7-9 May 1990 Conference Location: Baveno, Italy

Language: English

Subfile: B C

**Title: A printed circuit board (PCB) inspection system employing the multi-lighting optical system**

Author(s): Kishimoto, S.; Kakimori, N.; Yamamoto, Y.; Takahashi, Y.; **Harada, T.** ; Iwata, Y.; Shigeyama, Y.; Nakao, T.

Abstract: The authors have developed a PCB inspection system employing color **image processing** and multilighting which switches the lighting according to the type of inspection. Furthermore, they have...

...Descriptors: **printed** circuit manufacture...

... **printed** circuit testing

...Identifiers: color **image processing** ;

**44/3,K/4** (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

03960346 INSPEC Abstract Number: C91056542

**Title: OCR address reading/letter sorting machine for the Ministry of Posts and Telecommunications of Japan**

Author(s): Ishikawa, T.; Nishijima, Y.; Tsuji, Y.; Kaneko, I.; Itamoto, Y.; Bashomatsu, T.; **Ohta, K.** ; Uchida, T.; Okamura, T.; Kubota, T.; Senzaki, T.

Author Affiliation: NEC Corp., Tokyo, Japan

Journal: NEC Technical Journal vol.44, no.3 p.25-30  
Publication Date: March 1991 Country of Publication: Japan  
CODEN: NECGEZ ISSN: 0285-4139  
Language: Japanese  
Subfile: C

Author(s): Ishikawa, T.; Nishijima, Y.; Tsuji, Y.; Kaneko, I.; Itamoto, Y.; Bashomatsu, T.; Ohta, K. ; Uchida, T.; Okamura, T.; Kubota, T.; Senzaki, T.

...Abstract: Posts and Telecommunications of Japan, which has been required since the beginning of postal mechanization. **Image processing** technology, Kanji reading technology and intelligent processing technology for address recognition enable this machine to read addresses, handwritten or machine- **printed** , freely and without and restriction, and to sort letters. The machine is now in operation...

Identifiers: **image processing** ;

44/3,K/5 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

04793331 JICST ACCESSION NUMBER: 01A0116462 FILE SEGMENT: JICST-E  
**Evaluation of CRT-Displayed and Printout Image Quality in Digital Rotational Panoramic Radiography System. Third Report. Comparison between Images Obtained by the Combi-X and Paxorama2000 Computed Radiography Systems and Analogue Images on Film, and Effects of Unsharp Masking Filter .**

YAMAMOTO KAZUHIRO (1); **HARADA TAKUYA** (1); HAYAKAWA YOSHIHIKO (1); YAMADA MASAYUKI (1); KOSUGE YUJI (1); WAKO MAMORU (1); KUROYANAGI KIN'YA (1)  
(1) Tokyo Dent. Coll.

Shika Gakuho(Journal of the Tokyo Dental College Society), 2000,  
VOL.100,NO.9, PAGE.843-857, FIG.8, TBL.3, REF.52

JOURNAL NUMBER: S0708BAG ISSN NO: 0037-3710

UNIVERSAL DECIMAL CLASSIFICATION: 616.31-07

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

**Evaluation of CRT-Displayed and Printout Image Quality in Digital Rotational Panoramic Radiography System. Third Report. Comparison between Images Obtained by...**

**...and Paxorama2000 Computed Radiography Systems and Analogue Images on Film, and Effects of Unsharp Masking Filter .**

YAMAMOTO KAZUHIRO (1); **HARADA TAKUYA** (1); HAYAKAWA YOSHIHIKO (1); YAMADA MASAYUKI (1); KOSUGE YUJI (1); WAKO MAMORU (1); KUROYANAGI KIN'YA (1)

...ABSTRACT: storage phosphor-based computed radiography systems was performed. The quality of both CRT-displayed and **printout images** , with and without **processing** by an unsharp masking **filter** , as methods of displaying digital image media, was examined and these were further compared with...

...score around 4-good for all display methods, except for the low evaluation of the **printout** images without the unsharp masking **filter** . Scores were relatively low in the teeth and periodontium evaluation, but high in the evaluation of the outer contour of bony structures. The unsharp masking **filter** improved the overall scores. There was no significant difference in each item evaluated among the...

...display methods. The CRT images were comparable to the film images. Even the low-cost **printout** method, which was especially used in **images processed** by the unsharp masking **filter**, revealed results equal to film and CRT for each evaluation. (author abst.)  
...DESCRIPTORS: **image processing** ; ...  
...ink jet **printing** ;  
...BROADER DESCRIPTORS: **printing** (graphic arts)

**44/3,K/6** (Item 2 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

04730313 JICST ACCESSION NUMBER: 00A1054624 FILE SEGMENT: JICST-E  
**Evaluation of CRT-Displayed and Printout Image Quality in Digital Rotational Panoramic Radiography System. (First Report). Comparison between Images Obtained by the DenOptix computed Radiography System and Analogue Images on Film.**

MORI TOSHIMICHI (1); SHIBUYA HITOSHI (1); HAYAKAWA YOSHIHIKO (1); **HARADA TAKUYA** (1); KOSUGE YUJI (1); WAKO MAMORU (1); KUROYANAGI KIN'YA (1)  
(1) Tokyo Dent. Coll.

Shika Gakuho(Journal of the Tokyo Dental College Society), 2000,  
VOL.100,NO.8, PAGE.763-772, FIG.3, TBL.2, REF.46

JOURNAL NUMBER: S0708BAG ISSN NO: 0037-3710  
UNIVERSAL DECIMAL CLASSIFICATION: 616.31-07  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

**Evaluation of CRT-Displayed and Printout Image Quality in Digital Rotational Panoramic Radiography System. (First Report). Comparison between Images Obtained by...**

MORI TOSHIMICHI (1); SHIBUYA HITOSHI (1); HAYAKAWA YOSHIHIKO (1); **HARADA TAKUYA** (1); KOSUGE YUJI (1); WAKO MAMORU (1); KUROYANAGI KIN'YA (1)

...ABSTRACT: storage phosphor-based computed radiography system was performed. The quality of both CRT-displayed and **printout** images, as different methods of displaying digital image media, was examined and these were further...

...the CRT showed that these images were comparable to film images. Even the low-cost **printout** method demonstrated results equal to film and CRT especially for the evaluation of the outer...

...DESCRIPTORS: **image processing** ; ...

... **printed** image

**44/3,K/7** (Item 3 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

01657379 JICST ACCESSION NUMBER: 92A0684550 FILE SEGMENT: JICST-E  
**Study of diagnostic techniques of vatal meat quality by a colored scanning scope.**

KONO YUKIO (1); YOSHIGAMI WATARU (1); **HARADA TAKENORI** (1); FUJITA KOZO (1)

(1) Hiroshima Prefect. Animal Husbandry Exp. Stn.  
Hiroshima Kenritsu Chikusan Shikenjo Kenkyu Hokoku(Bulletin on the Hiroshima Prefectural Animal Husbandry Experiment Station), 1992, NO.8

, PAGE.11-14, FIG.6, TBL.4, REF.3  
JOURNAL NUMBER: G0246BAF ISSN NO: 0387-270X  
UNIVERSAL DECIMAL CLASSIFICATION: 637.51  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

KONO YUKIO (1); YOSHIGAMI WATARU (1); **HARADA TAKENORI** (1); FUJITA KOZO  
(1)

...BROADER DESCRIPTORS: **image processing** ; ...

... **printing** machine parts

**44/3,K/8** (Item 4 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

00997709 JICST ACCESSION NUMBER: 90A0172603 FILE SEGMENT: JICST-E  
**Special article 1. Easy graphics software and CG/CAD. New photography  
represented by D-graphy digital technology.**

KAWAGUCHI AZUMA (1); **MATSUMOTO AKIHIKO** (2)  
(1) Musashino Art Univ.; (2) MATSUMOTOAKIHIKOSHASHINJIMUSHO  
PIXEL, 1990, NO.88, PAGE.112-116, FIG.5, REF.4  
JOURNAL NUMBER: G0282BBO ISSN NO: 0287-511X  
UNIVERSAL DECIMAL CLASSIFICATION: 681.3:621.397.3 77  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

; **MATSUMOTO AKIHIKO** (2)  
...DESCRIPTORS: photographic **printing** paper...  
...BROADER DESCRIPTORS: **image processing** ;

**44/3,K/9** (Item 5 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

00993878 JICST ACCESSION NUMBER: 90A0324646 FILE SEGMENT: JICST-E  
**Creative workstation "2050/32EH" for high resolution image data  
processing .**

MAEBA KAZUHIKO (1); KYODA TADASHI (1); **HARADA TSUYOSHI** (1); WAKABAYASHI  
TAKASHI (2); KOJIMA TOMIHIKO (2)  
(1) Hitachi, Ltd., Kanagawa Works; (2) Hitachi, Ltd., Software Works  
Hitachi Hyoron, 1990, VOL.72,NO.2, PAGE.165-170, FIG.6, TBL.2, REF.2  
JOURNAL NUMBER: F0062AAN ISSN NO: 0367-5874 CODEN: HITAA  
UNIVERSAL DECIMAL CLASSIFICATION: 681.32  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

**Creative workstation "2050/32EH" for high resolution image data  
processing .**

MAEBA KAZUHIKO (1); KYODA TADASHI (1); **HARADA TSUYOSHI** (1)  
...DESCRIPTORS: **image processing** ; ...

...laser printer ;  
...BROADER DESCRIPTORS: non-impact printer ; ...  
... printer ;

44/3,K/10 (Item 6 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

00920820 JICST ACCESSION NUMBER: 89A0361997 FILE SEGMENT: JICST-E  
**Color reproduction of multi-color fabric.**  
OHTA KENICHI (1); TAKAHASHI KUNIHICO (1)  
(1) Textile Res. Inst. of Hyogo Prefecture  
Sen'i Kako(Dyeing & Finishing), 1989, VOL.41,NO.6, PAGE.280-288, FIG.13,  
TBL.3, REF.2  
JOURNAL NUMBER: G0574AAM ISSN NO: 0037-217X  
UNIVERSAL DECIMAL CLASSIFICATION: 677.027.4/.5  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

OHTA KENICHI (1); TAKAHASHI KUNIHICO (1)  
...DESCRIPTORS: ink jet printing ; ...

...jet printer ; ...

... image processing  
...BROADER DESCRIPTORS: printing (graphic arts...  
...non-impact printer ; ...

... printer ;

44/3,K/11 (Item 7 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

00158343 JICST ACCESSION NUMBER: 85A0510806 FILE SEGMENT: JICST-E  
**Computer aided paper design of yarn dyed fabrics.**  
OHTA KEN'ICHI (1); TAKAHASHI KUNIHICO (1)  
(1) Textile Res. Inst. of Hyogo Prefect.  
Hyogoken Sen'i Kogyo Shidosho Kenkyu Hokoku, 1985, NO.21(1984), PAGE.17-23  
, FIG.5, TBL.2  
JOURNAL NUMBER: S0987AAA ISSN NO: 0289-9493  
UNIVERSAL DECIMAL CLASSIFICATION: 677.024+677.054/.056  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

OHTA KEN'ICHI (1); TAKAHASHI KUNIHICO (1)  
...DESCRIPTORS: image processing ; ...

...ink jet printing ;  
...BROADER DESCRIPTORS: printing (graphic arts

44/3,K/12 (Item 1 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management

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00880844 T95040205171

**Visual feature of textile design**

(Optische Merkmale von Textilentwuerfen)

**Ohta, K** ; Akamatsu, T; Ishii, T; Nakata, A  
Himeiji Inst. of Technol., J; Kansai Jogakuin Women's College, J; Kobe  
Yamate Women's College, J; Public Health and Environment Agency of Hyogo, J  
Journal of the Textile Machinery Society of Japan, v40, n3, pp85-90, 1994  
Document type: journal article Language: English  
Record type: Abstract  
ISSN: 0040-5043

**Ohta, K** ; Akamatsu, T; Ishii, T; Nakata, A  
...DESCRIPTORS: WOVEN FABRIC; DESIGNING; PRODUCT DEVELOPMENT; GRAPHIC  
DESIGN MANIPULATION; PRESENTATION; OPTICAL PROPERTIES; **IMAGE** ANALYSIS;  
**IMAGE** DATA **PROCESSING** ; PRESSWORKING...

... **PRINTING**

**44/3,K/13** (Item 1 from file: 248)  
DIALOG(R)File 248:PIRA  
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00442835 Pira Acc. Num.: 40006808

**Title: COLOR IMAGE PROCESSING METHOD AND APPARATUS UTILIZING THE SAME**

Authors: **Ohta K**

Patent Assignee: CANON KK

Patent Number: EP 675638 Patent Date: 951004

Application number: JP 63405 Application Date: 940331

Publication Year: 1995

Document Type: Patent

Language: English

**Title: COLOR IMAGE PROCESSING METHOD AND APPARATUS UTILIZING THE SAME**

Authors: **Ohta K**

Abstract: A colour **image** processing apparatus converts an colour  
signal stored in a frame memory for display on a color...

... into a color signal whose color information is used for permanent  
visible representation by a **printer** and adjusts for differences between  
colour gamuts in different devices.

...Descriptors: **Image processing**

Section Headings: ELECTRONIC PHOTOGRAPHY (6042); PROPERTIES OF THE  
DEVELOPED **IMAGE** - **IMAGE** PROCESSING (6030); PROCESSING EQUIPMENT -  
**PRINTING** (6016)

? ds

Set	Items	Description
S1	539	BITMAP?? OR BIT()MAP??
S2	170	VECTOR?(3N)GRAPHIC?
S3	1981	2D OR (TWO OR 2)()DIMENSION? OR RASTER?
S4	24	RENDER? AND OBJECT?? AND S1
S5	202	RGB OR RED()GREEN()BLUE
S6	5513	(IMAG? OR DITHER?)(3N)PROCESS?
S7	3325	(BINARIZATION OR FILTER? OR BLACK()CHARACTER?()EXTRACT? OR ERROR()DIFFUSION)
S8	0	(UCR OR UNDER() (COLOR OR COLOUR) ()REMOVAL) (3N)PROCESS?
S9	829	(DETERMIN? OR DISCERN? OR DETECT? OR EVALUAT?) AND (S1 OR - S2 OR MONOCHROME? OR IMAG?? OR CHARACTER??)
S10	8591	ATTRIBUT? OR COLOUR? OR COLOR? OR VECTOR? OR CHARACTER??
S11	342	(OVERLAP? OR OVER()LAP? OR OVERLAY? OR OVER()LAY?) AND (IM- AGE?? OR PICTURE? OR PHOTOS OR PHOTO OR GRAPHIC??)
S12	609	PIXEL?? OR PICTURE()ELEMENT? OR PEL
S13	478	(RESOLUTION OR TONE??) AND (MODIF? OR CHANG? OR CONVERT? OR CONVERS? OR ALTER? OR ADJUST?)
S14	73	S12 AND (POSITION? OR PLACEMENT? OR LOCATION?)
S15	0	AU=(OHTA, K? OR YAMAGATA, S? OR HARADA, T? OR MATSUMOTO, A? OR OHTA K? OR YAMAGATA S? OR HARADA T? OR MATSUMOTO A?)
S16	1	S4 AND S5
S17	8	(S6 OR S7) AND S11 AND S12
S18	0	S17 AND PRINT?
S19	8	S17 NOT S16
S20	7	RD S19 (unique items)
S21	2	S13 AND S14
S22	2	S21 NOT (S17 OR S16)
S23	21	S9 AND S13
S24	14	S23 AND (S6 OR S7)
S25	13	S24 NOT (S21 OR S16 OR S17)



16/3,K/1

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00099586 DOCUMENT TYPE: Review

PRODUCT NAMES: Corel GRAPHICS SUITE 6 for PowerMac (561339)

TITLE: CorelDraw 6 Suite

AUTHOR: Priester, Gary W

SOURCE: Publish, v11 n12 p39(2) Dec 1996

ISSN: 0897-6007

HOME PAGE: <http://www.publish.com>

RECORD TYPE: Review

REVIEW TYPE: Review

GRADE: A

REVISION DATE: 20021125

...utilities are included, such as Corel WordPerfect 3.5; CorelDream 3D 6 for modeling and **rendering** ; CorelArtisan 6 for painting and image editing; and CorelTexture, a natural media generator. 1,000...

...functions, but many other toolbars are nested. A color toolbar allows users to work in **RGB** , CMYK, HSV, HSB, LAB, YIQ, and gray-scale color space. Eight resizable color palettes are provided, including Pantone and Trumatch, or users can create their own custom palettes. The helpful **object** properties menu activated when Control and Shift are held down together shows context-sensitive options. All tools provided are easily accessible, and many support dynamic linking. **Object** fill types include flat color, PostScript, vector or **bitmap** patterns, fractal textures, and four types of fountain fills.

?

20/3,K/1

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
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00142605 DOCUMENT TYPE: Review

PRODUCT NAMES: AxioVision (070441); Microscope/MACROSCOPE (140768)

TITLE: Biomedical Image Analysis Now: New Demands, New Capabilities

AUTHOR: Mazo, Barry

SOURCE: Advanced Imaging, v17 n10 p16(4) Oct 2002

ISSN: 1042-0711

HOME PAGE: <http://www.advancedimagingmag.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20030327

TITLE: Biomedical Image Analysis Now: New Demands, New Capabilities

...Microscope/MACROSCOPE are highlighted as four experts discuss the new requirements and abilities of biomedical **image** analysis. For instance, Buddy Bossman of Carl Zeiss says his company offers a detector on...  
...stack, and the goal of the company is to gather enough spectral information from an **image** to de-convolve the components of the **image** based on color. When a sample contains dyes of probes with very close or substantially **overlapped** spectra, **filter** -based systems fail, which increases the difficulty and error rate of useful post-processing. Mark...

...concurrent acquisition and display of two fluorophores in specimens up to 2x2cm, with 2 micron **pixels** and 16-bit dynamic range. MACROSCOPE provides false color display that can highlight areas of...

...under controlled environmental conditions. Dave Litwiller of DALSA notes that the company provides high-performance **image** sensing technology for acquisition of spectral **images**; it is not directly involved in evaluating results. However, DALSA is aware of the impact of always-more-powerful PCs in relationship to the increasing demand for higher dynamic-range **image** sensing technology.

DESCRIPTORS: Bioinformatics; Biology; **Graphics** for Science & Engineering  
; **Image Processing** ; Microscopy

20/3,K/2

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
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00131018 DOCUMENT TYPE: Review

PRODUCT NAMES: Image Processing (830196)

TITLE: Imaging on Display in France and the UK

AUTHOR: Braggins, Don

SOURCE: Advanced Imaging, v16 n5 p18(2) May 2001

ISSN: 1042-0711

HOME PAGE: <http://www.advancedimagingmag.com>

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

REVISION DATE: 20010830

PRODUCT NAMES: Image Processing (

...2065 can process more than 50 full frames per second, with a resolution of 800 **pixels** x 600 **pixels**. It includes the new Texas Instruments DSP processor with a 10MB DRAM and an 8-bit **overlay**. There was an imaging-based sensor from Swiss Fastcom Technology that uses certain types of CMOS sensors that are not found in CCD or 'integrating' CMOS sensors, which means that **image** data only needs to be read out from **pixels** that are likely to have useful information.

DESCRIPTORS: **Graphics** Tools; **Image** Processing ; Machine Vision;  
Optical Networks

20/3,K/3

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
(c)2004 Info.Sources Inc. All rts. reserv.

00124726 DOCUMENT TYPE: Review

PRODUCT NAMES: **Echo Fire 1.0** (008427)

TITLE: **Echo Fire v1.0**

AUTHOR: Sassoon, Tim

SOURCE: Digital Video Magazine, v8 n5 p99(1) May 2000

ISSN: 1075-251X

HOME PAGE: <http://www.dv.com>

RECORD TYPE: Review

REVIEW TYPE: Review

GRADE: B

REVISION DATE: 20010730

...also very useful for client- supervised sessions. However, no DV capture is yet available. Scope **overlays** can be difficult to read. The vendor will develop a Windows version of Echo Fire...

...monitor fixes to artwork early in the workflow process. Digital waveform monitor and vector-scope **overlays** provide accurate measurements for luminance and chrominance levels; a complete set of test patterns; a video-legal color picker; and ITU- R.BT601, DV, and 16:9 **pixel** aspect ratio support. With Echo Fire 1.0, After Effects can be expected to run...

DESCRIPTORS: Apple Macintosh; Digital Video; **Graphics** Tools; **Image**  
**Processing** ; MacOS

20/3,K/4

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00121539 DOCUMENT TYPE: Review

**PRODUCT NAMES:** Medical Diagnosis (830362); Image Processing (830196)

**TITLE:** Bigger, Better Ultrasound Volumes: A technique for mosaicing 3D...

**AUTHOR:** Mahoney, Diana Phillips

**SOURCE:** Computer Graphics World, v22 n12 p18(2) Dec 1999

**ISSN:** 0271-4159

**HOME PAGE:** <http://www.cgw.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Product Analysis

**GRADE:** Product Analysis, No Rating

**REVISION DATE:** 20000330

...**PRODUCT NAMES:** 830362); Image Processing (

...working in conjunction with researchers at the University of Tel Aviv uses mosaic 3D ultrasound **images** in a visualization system that can optimize use of ultrasound imaging while reducing the noise...

...parts of ultrasound scans that are acquired from slightly different viewpoints but have a substantial **overlap**. The technique then uses a method similar to morphing to create one volume that deftly...

...used for treatment planning and physician education, generally depend on reconstructions of sequences of 2D **images** or 'slices' of patient anatomy acquired with computed Tomography (CT) or magnetic resonance imaging (MRI

...

...To reduce expected variability of ultrasound data, the system employs a one-of-a-kind **image**-based registration method that directly observes gray values of **image pixels** instead of trying to interpret the values. Volumes are compared and registered based on information in each **pixel**. A culling method removes from consideration all **pixels** that do not have a counterpart in the other **image** or that are determined to have no useful information by the system, which uses statistical data from the **pixel**'s neighborhood to make the evaluation. According to developers, the method is useful for any...

**DESCRIPTORS:** Graphics for Science & Engineering; Image Processing ; Medical Diagnosis; Medical Surgery

20/3,K/5

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.

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00105489 DOCUMENT TYPE: Review

**PRODUCT NAMES:** Adobe After Effects 3.1 Windows 95 & NT (583243)

**TITLE:** After Effects 3.1 for Windows

**AUTHOR:** Christiansen, Mark

**SOURCE:** Digital Video Magazine, v5 n9 p26(3) Sep 1997

**ISSN:** 1075-251X

**HOME PAGE:** <http://www.dv.com>

**RECORD TYPE:** Review

**REVIEW TYPE:** Review

**GRADE:** A

REVISION DATE: 20000830

...any 2D or 3D software package. It does not have all of Adobe Photoshop's **overlay** modes and **filters**, but it does support straight and pre-multiplied alpha channels from several 32-bit forms...

...Targa, Photoshop, QuickTime, and Video for Windows, but it generates footage at up to 4Kx4K **pixel** sizes. Advanced tools for adding and removing video fields and 3:2 pull-down are...

DESCRIPTORS: Animation; **Graphics** Tools; IBM PC & Compatibles; **Image Processing**; Windows; Windows NT/2000

20/3,K/6

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00089768 DOCUMENT TYPE: Review

PRODUCT NAMES: **Painter 3D Macintosh 4.0** (343501)

TITLE: **Fractal Painter 4.0**

AUTHOR: Reveaux, Tony

SOURCE: MicroTimes, p244(4) Feb 5, 1996

HOME PAGE: <http://www.microtimes.com>

RECORD TYPE: Review

REVIEW TYPE: Review

GRADE: A

REVISION DATE: 20010530

...charcoal, and chalk. Painter 4.0 is noted for its achievement of closely spaced, sometimes **overlapping**, **pixel** progressions which emulate dabs of color media. Painter is recommended for implementation on a PowerPC...

DESCRIPTORS: Apple Macintosh; Draw; **Graphics** Tools; **Image Processing**; MacOS; Paint

20/3,K/7

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00061032 DOCUMENT TYPE: Review

PRODUCT NAMES: **TranScribe Plus** (491756); **PixelTrak** (494267); **GTX RasterCAD** (458023); **CAD Overlay ESP** (692379); **CAD Core/Tracer** (348911)

TITLE: **Raster-to-Vector Conversion**

AUTHOR: Sheerin, Peter

SOURCE: Cadence, v9 n1 p54(9) Jan 1994

ISSN: 0887-9141

HOME PAGE: <http://www.cadenceweb.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20020930

...PRODUCT NAMES: 458023); CAD Overlay ESP...

Converting paper drawings to AutoCAD can be done with a digitizing program. Arbor **Image**'s Transcribe Plus is a Windows-based product running inside AutoCAD. Users can select regions for speckle removal, and it includes a basic **pixel** editor for touch-up. Cadix Research and Development's **Pixel** Trak is a standalone DOS application. While it does not support drawing arcs or circles...

...is a capable vector-tracing engine. GTX's GTX Raster CAD offers more features for **processing** raster **images**. **Image** System's CAD **Overlay** ESP is similar, but with fewer raster snap modes. Users can also attach additional raster reference files, but they cannot be edited or snapped. Tracer, from Information and **Graphics** Systems, allows manual tracing, but its main focus is semi-automatic tracing. Tracer has several...

COMPANY NAME: Arbor **Image** Corp...

...134732); Information & **Graphics** Systems Inc...

DESCRIPTORS: Autotracing; CAD Utilities; Digitizing; DOS; IBM PC &  
Compatibles; **Image** **Processing**

?

22/3,K/1

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00149142 DOCUMENT TYPE: Review

PRODUCT NAMES: Kodak ES/MV BW 1.0 (192619); IMAQ Vision (126161);  
LabVIEW (015939)

TITLE: Dual-camera systems zeros in on PCB defects

AUTHOR: Staff

SOURCE: Vision Systems Design, v8 n10 p12(2) Oct 2003

ISSN: 1089-3709

HOME PAGE: <http://www.vision-systems-design.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20031230

...images. The ES 1.0/MV BW megapixel camera was deployed with a Navitar 7000 **adjustable** zoom lens set at 0.3x for the large FOV camera and a 6.4x

...  
...sufficient to support a sample eight inches in diameter covered with a polarizing sheet is **positioned** on a two-axis linear rail system to allow sample motion. The PXI Industrial PC...

...and two 1407 and 1422 PXI IMAQ frame-grabber cards control the linear rail stage. **Resolution** reached with the small-FOV camera, which does the second evaluation of the found defects, is calculated with IMAZ Vision Builder and a USAF **Resolution** target to 1.17  $\mu\text{m}$ / **pixel**. With that **resolution**, the system found and measured defects a range between 10 and 100  $\mu\text{m}$ .

22/3,K/2

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00116036 DOCUMENT TYPE: Review

PRODUCT NAMES: Flight Unlimited III (749206)

TITLE: Flight Unlimited III

AUTHOR: Atkin, Denny

SOURCE: Computer Gaming World, v178 p78(2) May 1999

ISSN: 0744-6667

HOME PAGE: <http://www.computergaming.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20000330

...have been considered, and many new features are added to this version. The most obvious **change** is the graphic presentation of Seattle, which is accomplished with satellite imagery to four meters-per- **pixel resolution**. Terrain graphics in Flight II were hard to match, but Flight III's are

much...

...Flight III has a full set of navigational tools, including nondirectional beacons and a global **positioning** system. 10 flyable aircraft are featured, including the Beechjet 400A, the Lake Renegade 270 Seaplane...

...and the Stemme S10-VT glider. Among other features is support for time-of-day **changes** .

?



25/3,K/1

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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01777706 DOCUMENT TYPE: Product

PRODUCT NAME: MpegRepair (777706)

PixelTools Corp (670502)  
10721 Wunderlich Dr  
Cupertino, CA 95014 United States  
TELEPHONE: (408) 374-5327

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20000330

...MPEG video streams. It offers an MPEG-1 or MPEG-2 encoder, stream analyzer, high- **resolution** decoder, and video stream editor. The MpegRepair (TM) system can save multimedia producers time by...

...the need to record entire recordings. The amount of compression per recording block can be **modified** on a scene basis, frame basis, or subframe basis. Quantization tables can be set up...

...or users can build their own control tables. Bit rate analysis features allow producers to **determine** the difficulty involved in encoding video content. MpegRepair plots **changes** and encoding complexity values on a chart, making it easy to allocate content for limited-space output media such as DVDs. MpegRepair can **detect** scene **changes** throughout a video and force the use of a new encoding block (GOP) for a...

...formats); Pentium- and MMX-optimized code; threaded operations to support multiprocessor platforms; a Decoder that **converts** MPEG files into a sequence of frames, or from low-profile to high-profile streams...

...floating point precision; user-controlled graphical overlays; constant or variable bit rates; area and region **filters** ; batch mode; extensive graphical views, including frame-by-frame displays and encoding statistics; and an...

DESCRIPTORS: Digital Video; File **Conversion** ; Graphics Tools; **Image Processing** ; Multimedia; Streaming Media

25/3,K/2

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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01753114 DOCUMENT TYPE: Product

PRODUCT NAME: UN-SCAN-IT 5.0 (PC) & 4.2 (Mac) (753114)

Silk Scientific Inc (523798)  
PO Box 533  
Orem, UT 84059 United States  
TELEPHONE: (801) 377-6978

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030721

Silk Scientific offers UN-SCAN-IT (TM), a product that can automatically **convert** hard copy graphs to (x,y) ASCII data at full scanner **resolution**, operates with any The application operates with any full-page scanner, hand scanner, or other **image** input device. UN-SCAN-IT digitizes strip charts, instrument output, old graphs, published graphics, and...  
...to-use, fast, and accurate, is a good choice for those who have had problems **discerning** the content of a printed graph. UN-SCAN-IT 5.0 and 4.2 compares...

...and graphics programs. UN-SCAN-IT can digitize PCX, TIFF, BMP, JPG, TGA, and IMGA **images**, and supports TIFF, PICT, and JPG files on the Mac. Live, on- screen graphics allow...

...in UN-SCAN-IT 5.0 include 32-bit and 16-bit versions, grid line **filters**, multiline digitizing, contour line digitizing, and custom screen colors.

DESCRIPTORS: CAD Utilities; Digitizing; File **Conversion**; Graphics for Science & Engineering; Graphics Tools; **Image Processing**; Scanners

25/3,K/3

DIALOG(R) File 256:SoftBase:Reviews,Companies&Prods.  
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00146490 DOCUMENT TYPE: Review

PRODUCT NAMES: **Ladar (806242)**

**TITLE: Ladar Images in Three Dimensions**  
AUTHOR: Boas, Gary  
SOURCE: Photonics Spectra, p22(2) Feb 2003  
ISSN: 0731-1230

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

REVISION DATE: 20030830

**TITLE: Ladar Images in Three Dimensions**

...system for tactical applications that provides single-photon sensitivity, depth precision close to 3-cm, **adjustable** angular **resolution**, and 128x128 pixels. Researcher Richard M. Heinrichs says a short-pulse laser illuminates the area. Light reflected from an area of interest is **imaged** onto an array of **detectors**, and **detectors** in the ladar system can measure the time of flight of the photons and the...

...is encoded in each pixel and allows the ladar to produce 3D (angle-angle-range) **images**. The technology was first developed for the U.S. Department of Defense for use in...

DESCRIPTORS: 3D Graphics; **Image Processing**; Lasers & Optics;

Technology Research

25/3,K/4

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00141445 DOCUMENT TYPE: Review

PRODUCT NAMES: FaceSnap RECORDER (130486); StreamPix (059251); Censys3D SDK (133647)

TITLE: Computer Vision Systems for Security

AUTHOR: Handley, Rich

SOURCE: Advanced Imaging, v17 n8 p16(3) Aug 2002

ISSN: 1042-0711

HOMEPAGE: <http://www.advancedimagingmag.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20030428

...defined as the automatic extraction of information for objects or scenes in one or multiple **images**. Computer vision differs from **image processing**, which targets **modification** of an **image** for later human viewing or interpretation. Computer vision for security is meant to identify and authenticate a person or persons via imaging. Face **detection** and recognition, acoustic-visual speaker verification, and multi-model biometrics personal verification can all be...

...is a combined digital video recorder and face recognition system that finds and extracts facial **images** from video footage for ID and verification. StreamPix is software designed to grab live uncompressed or compressed video from IEEE's FireWire, analog, high-speed, or high-**resolution** digital cameras and send it directly to a hard disk drive or RAM memory. Censys...

DESCRIPTORS: Biometrics; **Image Processing**; Machine Vision; Program Development

25/3,K/5

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00138840 DOCUMENT TYPE: Review

PRODUCT NAMES: Adobe Photoshop (213756); Digital Photography (848778)

TITLE: **Prepping Images in Photoshop**

AUTHOR: Martin, Glenn

SOURCE: Digital Imaging, p26(2) Apr/May 2002

ISSN: 1084-5119

HOMEPAGE: <http://www.digitalimaging.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20020830

**TITLE: Prepping Images in Photoshop**

...S3Pro (with FireWire) is highlighted in a discussion of the use of Photoshop to prep **images** for publication. A digital **imager** in Las Vegas, Nevada, says his ad illustration studio works with many advertising agencies to...

...other corporate clients. They find that the art director often does not know how the **images** will be output and used when assigning a shoot, and must find ways to **evaluate** the **image**, find a way to get good density, optimize **tone** curving and contrast for the **image** for output, retouch, and deploy master RGB workflow. The digital photographer/computer artist should know where the **image** is going, but if this is not possible, the receiving professional should be given some...

...MegaVision S3Pro for people and other moving subjects, but also tuning, tweaking, and enhancement of **images** before they are sent on. Topics covered include **adjusting** density for the environment; **adjusting tone** curve/contrast for output; retouching after balancing density, contrast, and color; and using master RGB workflow to enhance control over quality of outputs by **converting** from a Master RGB rather than from a previously clipped color-lossed CMYK.

DESCRIPTORS: Advertising; Electronic Publishing; Graphic Arts; **Image Processing** ; Photography; Photoshop

25/3,K/6

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00135416 DOCUMENT TYPE: Review

**PRODUCT NAMES: Digital Elevation Models (848018)**

**TITLE: Digital Elevation Data from Stereo Images : Almost a Reality**

AUTHOR: Nelson, Lee J

SOURCE: Advanced Imaging, v16 n10 p22(3) Oct 2001

ISSN: 1042-0711

HOME PAGE: <http://www.advancedimagingmag.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20030330

**TITLE: Digital Elevation Data from Stereo Images : Almost a Reality**

Digital Terrain Elevation Data (DTEDs), or geographic matrices that are **converted** to numerical format, are more stringent versions of digital elevation models (DEMs). Among applications for...

...and accuracy limits. NIMA developed a method for understanding and meeting growing demand for higher- **resolution** DTED. Several private contracts also say they can gather and prepare densified elevation, and NIMA's specification includes a protocol for **evaluating** those results.

DESCRIPTORS: 3D Graphics; Aerial Images ; GIS; Image Processing ;  
Models

25/3,K/7

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00134487 DOCUMENT TYPE: Review

PRODUCT NAMES: nik Sharpener Pro! (017817); nik Color Efex Pro! (017795)

TITLE: Optimizing Images : Scanning is just the beginning of the image

...

AUTHOR: Kokemohr, Nils

SOURCE: CrossMedia, p40(2) Sep/Oct 2001

HOME PAGE: <http://www.crossmediamag.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20020330

TITLE: Optimizing Images : Scanning is just the beginning of the image

...

Optimizing scanned images in Photoshop can be facilitated by Nik Multimedia's Photoshop plug-ins, nik Sharpener Pro! and nik Color Efex Pro!. Nik included an image analysis facility in Nik Sharpener Pro!'s interface, in recognition of the fact that detail and image characteristics play an important role in determining what is needed for a final print. It shows the level of clarity of the image, using the new Real Resolution clarity index, which takes into account the detail in the image and the resolution. It also shows the optimal size for printing that image using a given selected print process. After checking the image, the process of image editing begins, and enhancements can be made using Nik's Nik Color Efex Pro!, a set of digital photographic filters that makes adjustments much easier. Unlike other filters that offer text-based and other nonphotographic effects, Color Efex Pro! is a set of true photographic filters, including a Skylight filter for removing blue casts, a Polarization filter for enhancing a blue sky, and a Sunshine filter to cast natural light on an image.

DESCRIPTORS: Graphics Tools; Image Processing ; Photoshop; Scanners

25/3,K/8

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00131016 DOCUMENT TYPE: Review

PRODUCT NAMES: CAMpet RT (051713); DisplayMate (340405)

TITLE: CAMpet RT and DisplayMate

AUTHOR: Yencharis, Len

SOURCE: Advanced Imaging, v16 n5 p8(2) May 2001

ISSN: 1042-0711

HOME PAGE: <http://www.advancedimagingmag.com>

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

REVISION DATE: 20010830

...from less than 1GB to about 2.5GB, and MPEG-2 is recorded at a **resolution** of 720 pixels X 480 lines. Using CAMpet RT, the user can create an MPEG...

...notebook or desktop PC. DisplayMate is a dedicated utility for setting up, tuning up, calibrating, **evaluating**, and testing video displays, monitors, and complete video systems. Both novices and experts can get the highest possible **image** and picture quality on any type of display, including CRTs, LCDs, video projectors, and HDTVs. The Set Up program can help the user **adjust** every control, and it has expert online help and advice for improving **image** and picture quality.

DESCRIPTORS: Authoring Systems; CD-R; Color Matching; Digital Video; DVD; Graphics Tools; **Image Processing**

25/3,K/9

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
(c)2004 Info.Sources Inc. All rts. reserv.

00129208 DOCUMENT TYPE: Review

PRODUCT NAMES: **Eye Candy 4000 (651648)**

**TITLE: All's Well in Candy Land: Alien Skin Software's Eye Candy 4000**  
AUTHOR: Saucier, Christine A  
SOURCE: AV Video & Multimedia Producer, v23 n2 p60(4) Feb 2001  
ISSN: 1090-7459  
HOMEPAGE: <http://www.avvideo.com>

RECORD TYPE: Review  
REVIEW TYPE: Review  
GRADE: A

REVISION DATE: 20010530

...Deneba Canvas, and Jasc Paint Shop Pro. New features in this release include five new **filters** and some enhancements to the previously provided **filters**. Testers found installation to be easy and quick and began operation by choosing a software **filter** to apply in an **image**-editing application. At this point, testers **detected** some significant interface **changes**. For instance, the preview window is much larger and resizable, and many settings are grouped...

...allows users to see how an effect will show up with all layers in place. **Filters** have some new controls, including Color Gradient Editor and Bevel Profile Editor. Eye Candy 4000 has an impressive ability to generate **resolution**-neutral effects and also provides users much more control over work than possible with previous...

DESCRIPTORS: Graphics Tools; **Image Processing**; Multimedia; Photoshop; Web Site Design

25/3,K/10

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00128274 DOCUMENT TYPE: Review

PRODUCT NAMES: TIFF (840092); JPEG (830577)

TITLE: The puzzling process of publishing images to the Web  
AUTHOR: Chester, Bernard Gingrande, Arthur  
SOURCE: KM World, v10 n1 p16(3) Jan 2001  
ISSN: 1060-894X  
HOMEPAGE: <http://www.KMonline.com>

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

REVISION DATE: 20010430

TITLE: The puzzling process of publishing images to the Web

...JPEG file formats are described in a discussion of problems encountered by organizations that publish **images** to the Web and must 'reduce **resolution** to achieve satisfactory download speed which often means forfeiting quality and legibility.' **Images** can be compressed, but they still will much larger than the common HTML page. Users...

...of viewing applications by generating a 72-dpi thumbnail for display and offering the full **image** on demand. However, many choices of browser, native operating system (OS), tools, and plug-ins are available, which increases the difficulty of providing **images** on Web sites that can be optimally displayed for all comers. Therefore, those who publish **images** to the Web have to **evaluate** many issues, including the type of **images** used; how they will be used; whether they are **images** of text documents or strictly graphical; if the application is only for viewing, or if users will have to **change** or annotate the **image**; and what quality **image** is required for the task. TIFF files are not easily streamed over the Web, and ...

DESCRIPTORS: Electronic Publishing; Graphics Tools; HTML; **Image Processing**; Web Site Design

25/3,K/11

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00122315 DOCUMENT TYPE: Review

PRODUCT NAMES: Adobe Photoshop (213756)

TITLE: Pixels to Prepress: Optimizing Images for the Offset Printing Process  
AUTHOR: Paynter, Herb  
SOURCE: Photo>Electronic Imaging, v43 n1 p62(6) Jan 2000  
ISSN: 0146-0153  
HOMEPAGE: <http://www.peimag.com>

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

REVISION DATE: 20010630

**TITLE: Pixels to Prepress: Optimizing Images for the Offset Printing Process**

Adobe Systems' Adobe Photoshop and comparable **image** editors are the best choice for making **adjustments** to scanned **images** in page layout software, such as QuarkXPress, InDesign, and PageMaker. QuarkXPress, InDesign, and PageMaker themselves...

...this purpose. Six important factors must be considered and parameters tuned for color and halftone **images** : **resolution** ; highlight setting; darkest/shadow area; midtones; Unsharp Masking; and color balance. Instructions are provided that...

...middle Eyedropper tool, setting R/G/B values to 127 each. An area of the **image** that should be neutral gray should be found and clicked. Topics covered include **Imagesetter** exposure; film **processing** ; proofing; plate production; and proof/plate contact pressure, exposure, and development. Users can either demonstrate ultra control or **discernment** -and-discrimination (the latter is the 'Norman Schwarzkopf approach') in bulletproofing jobs as they move...

DESCRIPTORS: Color Matching; Desktop Publishing; **Image Processing** ;  
Page Composition; Photoshop; Scanners; Soft Proofing

**25/3,K/12**

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00115453 DOCUMENT TYPE: Review

**PRODUCT NAMES: PhotoJazz 1.0 Windows & PowerMac (747149)**

**TITLE: BitJazz saves time and space with image compression**  
**AUTHOR: Howard, Courtney E**  
**SOURCE: Electronic Publishing Magazine, v23 n1 p59(1) Jan 1999**  
**ISSN: 1097-9190**  
**HOME PAGE: <http://www.electronic-publishing.com>**

RECORD TYPE: Review  
REVIEW TYPE: Product Analysis  
GRADE: Product Analysis, No Rating

REVISION DATE: 20021226

**TITLE: BitJazz saves time and space with image compression**

BitJazz's PhotoJazz 1.0 is a low-cost plug-in that compresses **images** at a ratio of 2.5:1 with no loss in quality. This solves the problem of having large file sizes attached to high- **resolution images** , which hinders the workflow process because the larger files are difficult to store and slow to **process** . The BitJazz lossless **image** compression engine preserves **image** quality. Users save **images** to the PhotoJazz format, rapidly condensing **image** files to less than half of their original size. The tool



is fast and effective. PhotoJazz supports high-quality **image** modes and multiple alpha and spot color channels. It does not support **bitmap** and indexed color **images**, and these have to be **converted** to gray-scale and RGB mode, respectively. PhotoJazz is compatible with Adobe's **image** editing and creation programs. The PhotoJazz file includes non-**image** data, such as file and page setup information, paths, guides, grids, and thumbnail previews. The...

...Redundancy Checking, and the user is alerted to corrupted information as soon as it is **detected**. PhotoJazz is shipped in two packages, for PowerMac and Windows 9x and NT systems.

DESCRIPTORS: Apple Macintosh; File Compression; Graphics Tools; IBM PC & Compatibles; **Image Processing**; MacOS; PowerMac; Windows; Windows NT/2000

25/3,K/13

DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.  
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00106770 DOCUMENT TYPE: Review

PRODUCT NAMES: Adobe Photoshop (213756)

TITLE: From the Web to the press

AUTHOR: Hamlin, J Scott

SOURCE: Electronic Publishing Magazine, v21 n11 p52(3) Nov 1997

ISSN: 1097-9190

HOME PAGE: <http://www.electronic-publishing.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

REVISION DATE: 20021226

...and World Wide Web designer who created the Herron School of Art Web site to **convert** Web **images** to print materials. When designing the site, he did not concern himself about how **images** from the Web to be used in printed materials would look in the CMYK color...

...with a thin strip of ochre at the top. When the site was completed, the **images** were good enough to be chosen for inclusion in a catalog. The need to test the effectiveness with which RGB **images** could be translated to CMYK then arose. The translation, however, was unsatisfactory. An unacceptable color shift, especially in the yellow background, was the result, rendered in greenish CMYK **tones**. The **images** were viewed in Photoshop, and the Web designer used the Preview and Gamut Warning features to **determine** where color shifts in the **conversion** began. The tools helped the designer establish that little color shifting would occur in photographic...

DESCRIPTORS: Designers; Electronic Publishing; Graphics Tools; **Image Processing**; Internet Marketing; Page Composition; Photoshop;

File 344:Chinese Patents Abs Aug 1985-2003/Nov  
(c) 2003 European Patent Office  
File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)  
(c) 2004 JPO & JAPIO  
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200402  
(c) 2004 Thomson Derwent

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Set	Items	Description
S1	7998	BITMAP?? OR BIT()MAP??
S2	476	VECTOR?(3N)GRAPHIC?
S3	94223	2D OR (TWO OR 2)()DIMENSION? OR RASTER?
S4	37	RENDER? AND OBJECT?? AND S1
S5	9496	RGB OR RED()GREEN()BLUE
S6	149184	(IMAG? OR DITHER?)(3N)PROCESS?
S7	655747	(BINARIZATION OR FILTER? OR BLACK()CHARACTER?()EXTRACT? OR ERROR()DIFFUSION)
S8	150	(UCR OR UNDER() (COLOR OR COLOUR) ()REMOVAL) (3N)PROCESS?
S9	281807	(DETERMIN? OR DISCERN? OR DETECT? OR EVALUAT?) AND (S1 OR - S2 OR MONOCHROME? OR IMAG?? OR CHARACTER??)
S10	947159	ATTRIBUT? OR COLOUR? OR COLOR? OR VECTOR? OR CHARACTER??
S11	23386	(OVERLAP? OR OVER()LAP? OR OVERLAY? OR OVER()LAY?) AND (IM- AGE?? OR PICTURE? OR PHOTOS OR PHOTO OR GRAPHIC??)
S12	139041	PIXEL?? OR PICTURE()ELEMENT? OR PEL
S13	81871	(RESOLUTION OR TONE??) AND (MODIF? OR CHANG? OR CONVERT? OR CONVERS? OR ALTER? OR ADJUST?)
S14	25335	S12 AND (POSITION? OR PLACEMENT? OR LOCATION?)
S15	2027225	IC=(H04N? OR B41J? OR G06F? OR G06T?)
S16	204	S9 AND S10 AND S11 AND S12
S17	15	S16 AND S13
S18	2	S17 AND S5
S19	12	S17 AND S15
S20	10	S19 NOT S18
S21	1	S20 AND AD=19990309:20040112/PR
S22	1	S20 AND AD=20020821:20040112
S23	1	S21 OR S22
S24	12	S20 OR S19
S25	1254	S13 AND S14
S26	42	S25 AND S11
S27	2	S26 AND S1
S28	1	S27 NOT (S18 OR S19 OR S21)
S29	1	S4 AND S5
S30	1	S29 NOT (S27 OR S18 OR S19 OR S21)
S31	55229	(S6 OR S7 OR S8) AND S9
S32	535	S31 AND S5
S33	450	S32 AND S10
S34	146	S33 AND S12
S35	28	S34 AND PRINT?
S36	27	S35 NOT (S29 OR S27 OR S18 OR S19 OR S21)
S37	24	S15 AND S36
S38	4	S37 AND AD=19990309:20040112/PR
S39	20	S37 NOT S38

18/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

009873825 \*\*Image available\*\*  
WPI Acc No: 1994-153738/199419  
XRPX Acc No: N94-120743

Colour error diffusion circuit - has colour signal input to colour determiner after RGB to CMY conversion from image processor, and output half- tone colour signal selected to have smallest possible error.

Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU ); SAMSUNG ELECTRONICS CO (SMSU )

Inventor: KIM S; KIM Y; KIM S K; KIM Y S

Number of Countries: 007 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2273017	A	19940601	GB 9323959	A	19931122	199419 B
FR 2698507	A1	19940527	FR 9314089	A	19931125	199424
DE 4340217	A1	19940630	DE 4340217	A	19931125	199427
JP 6225171	A	19940812	JP 93296190	A	19931126	199437
US 5375002	A	19941220	US 93157270	A	19931126	199505
TW 247386	A	19950511	TW 93110609	A	19931214	199530
GB 2273017	B	19961106	GB 9323959	A	19931122	199648
KR 9605016	B1	19960418	KR 9222453	A	19921126	199915
DE 4340217	C2	19990325	DE 4340217	A	19931125	199916

Priority Applications (No Type Date): KR 9222453 A 19921126

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2273017	A	26		H04N-001/46	
DE 4340217	A1	11		G06K-015/22	
JP 6225171	A	7		H04N-001/46	
US 5375002	A	12		H04N-001/40	
GB 2273017	B	1		H04N-001/60	
FR 2698507	A1			H04N-001/46	
TW 247386	A			H04N-001/00	
KR 9605016	B1			B41J-002/435	
DE 4340217	C2			H04N-001/52	

Colour error diffusion circuit...

...has colour signal input to colour determiner after RGB to CMY conversion from image processor, and output half- tone colour signal selected to have smallest possible error.

...Abstract (Basic): The error diffusion circuit has a colour determiner (205) for adding CMY signals, generated from a colour printer from scanned (201) RGB signals, to a diffusion error to generate a current pixel value. The pixel value is sequentially compared with supplied look-up data to determine an address of error look-up data having the smallest error as output pixel colour information. An error memory (207) stores the smallest error out of the errors calculated from the colour determiner as an error for a current pixel. The stored error is read out when a next pixel is processed...

...The read error is provided as neighbouring pixel information to the colour determiner to generate the diffusion error. A neighbouring pixel colour information memory (204) stores the output pixel colour information of the next pixel. An error look-up table memory

(203) stores error values generated when printing an input **pixel** according to the output **pixel colour** information and provides the error values as the look-up error data to the **colour determiner**. The error look-up table memory is accessed by the neighbouring **pixel colour** information...

- ...ADVANTAGE - Compensates for ink bleed and **overlap** of **colour** between adjacent dots. May be calibrated for any printer...
- ...Abstract (Equivalent): An error diffusion circuit for a **colour image** printer having a circuit for receiving R-G-B( **red - green - blue** ) signals and **converting** said R-G-B signals into C-M-Y (cyan-magenta-yellow) signals, said error diffusion circuit comprising:
  - colour determining** means for adding said C-M-Y signals to a diffusion error to generate a current **pixel** value, comparing said current **pixel** value with sequentially supplied error look-up data to **determine** an address of error look-up data having the smallest error as output **pixel colour** information, and applying said output **pixel colour** information to said printer, error storage means for storing the smallest error out of errors calculated from said **colour determining** means as an error for a current **pixel**, reading out the stored error when a next **pixel** is processed, and providing the read error as neighbouring **pixel** error information to said **colour determining** means so as to generate said diffusion error; neighbouring **pixel colour** information storage means for storing said output **pixel colour** information as neighbouring **pixel colour** information of the next **pixel**; and error look-up table storage means for storing error values generated when printing an input **pixel** according to said output **pixel colour** information and providing said error values as said error look-up data to said **colour determining** means, said error look-up table storage means being accessed by said neighbouring **pixel colour** information...
- ...Abstract (Equivalent): A circuit, scanning **colour** documents and generating C-M-Y (cyan-magenta-yellow) signals from an input **pixel**, includes a **colour determining** portion for adding the C-M-Y signals to a diffusion error to generate a current **pixel** value. The current **pixel** value is compared with sequentially supplied error look-up data to **determine** an address of error look-up data having the smallest error as output **pixel colour** information, this information being applied to the printer...
- ...An error storage portion, storing the smallest error out of errors calculated from the **colour determining** portion as an error for a current **pixel**, reads out the stored error when a next **pixel** is processed, and provides the read error as neighbouring **pixel** error information to the **colour determining** portion to generate the diffusion error...
- ...USE - Compensating for ink bleed and **overlap** of **colour** between neighbouring **pixel** and current **pixel**. Compensating for printing characteristics of printer...

Title Terms: **COLOUR** ;

18/3,K/2 (Item 2 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

003850099  
WPI Acc No: 1983-846350/198351

XRPX Acc No: N83-225680

**Appts. combining video signals with text and graphics signals - has video switch and computer subsystem synchronised to track jitter in video signals**

Patent Assignee: NIPPON DIGITAL EQUIP KK (DIGI )

Inventor: STELL D E

Number of Countries: 016 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 96628	A	19831221				198351 B
AU 8315016	A	19831208				198405
FI 8301962	A	19840131				198411
BR 8303008	A	19840131				198412
JP 59057279	A	19840402	JP 8398747	A	19830602	198419
US 4498098	A	19850205	US 82384439	A	19820602	198508
CA 1185377	A	19850409				198519
EP 96628	B	19901114				199046
DE 3381990	G	19901220				199101

Priority Applications (No Type Date): US 82384439 A 19820602

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 96628	A	E	37		
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Designated States (Regional): BE CH DE FR GB IT LI LU NL SE

EP 96628	B				
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Designated States (Regional): BE CH DE FR GB IT LI LU NL SE

**Appts. combining video signals with text and graphics signals...**

- ...Abstract (Basic): appts. is provided for combining video signals containing synchronisation signals with computer generated text and **graphics** signals for display together, in **overlay**, on a raster scan video display. A circuit **converts** the format of at least one of the signals to the non-phase modulated format...
- ...A video switch selectively supplies to the display, for each **pixel**, either the video signal or the computer-generated signals. The slave synch. signals are supplied...
- ...output subsystem as a clock for controlling the rate and time at which it supplies **pixel** information to the video switch, and to the video switch to control the time at...
- ...generated signals. The appts. may be used for educational purposes e.g. for computer which **evaluates** student responses and causes the video disc player to choose its display sequence.
- ...Abstract (Equivalent): Apparatus for combining video signals from a video source (20) with computer-generated text and **graphics** signals provided from a computer video output subsystem (50), for display together, in **overlay**, on a raster scan video display device (40), comprising: A. the video signals containing synchronization signals; B. means (80) for **converting** the format of at least one of said video signals and computer-generated text and **graphics** signals to the non-phase modulated format of the other if both are not already...
- ...the non-phase modulated versions of the video signals and the computer-generated text and **graphics** signals, on the other hand, for selectively supplying to the display device (40) for each **pixel**, either the video signals or the computer-generated signals; and E. the slave synchronization signals...

...as a clock (187) for controlling the rate and the time at which it supplies **pixel** information to the video switch (90), and to the video switch (90) to control the...

...Abstract (Equivalent): The computer-generated video is provided in **RGB** format, the other video is **converted** to **RGB** format if not already in that form and the two sets of **RGB** signals are provided to a switch. The switch (multiplexer) selects which one of the two **RGB** signal sets to display, separately for each **pixel**. The **colour** of the computer-generated signals controls the switch's selection of source. A master-slave sync system maintains registration between the two sets of **RGB** signals...

...locks the video switch, display and computer video generator to the timing of the video **image** source...

...base correctors. Displays up to 4 times text in given area of screen with high **resolution**. (18pp)n

...Title Terms: **GRAPHIC** ;

?

24/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015340882 \*\*Image available\*\*  
WPI Acc No: 2003-401820/200338  
XRPX Acc No: N03-320461

**Raster data trapping method for color printing systems, involves sending color of any two pixels in square of pixels adjacent to center point to trap generator, along with determined maximum number to obtain trap color**

Patent Assignee: XEROX CORP (XERO )  
Inventor: BOONE J; MCELVAIN J S; RUMPH D E  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030025945	A1	20030206	US 99409541	A	19990929	200338 B
			US 2002263534	A	20021002	

Priority Applications (No Type Date): US 99409541 A 19990929; US 2002263534 A 20021002

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030025945	A1	16	H04N-001/41	Cont of application US 99409541

**Raster data trapping method for color printing systems, involves sending color of any two pixels in square of pixels adjacent to center point to trap generator, along with determined maximum number to obtain trap color**

Abstract (Basic):

... scan lines are placed in run length encoded form in the buffer, based on the **determined** maximum number x of **pixels** whose **color** is **changeable** by trap generator. The square of **pixels** adjacent to **determined** center point is obtained. The **color** of any two **pixels** in the square is **determined** and sent to generator along with number x to obtain trap **color** .

... In **color** printing systems, for deciding the location at which trapping of **color** **image** is to performed by using trapping generator

... Enables correction of **toner** misregistration in **color** printing systems which print run length encoded **image** data. Provides minimal overhead as buffered runs divided into segments of uniform **overlap** is used...

...Title Terms: **COLOUR** ;

International Patent Class (Main): **H04N-001/41**

International Patent Class (Additional): **H04N-001/46**

24/3,K/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2004 Thomson Derwent. All rts. reserv.

013465468 \*\*Image available\*\*  
WPI Acc No: 2000-637411/200061  
XRPX Acc No: N00-472708

**High resolution panchromatic imagery and low resolution multispectral imagery combining method for earth mapping, involves performing pixel by pixel processing of collected imageries to produce sharpened image**

Patent Assignee: LOCKHEED MARTIN CORP (LOCK )

Inventor: LINDGREN J E

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No.	Kind	Date	Applicat No	Kind	Date	Week
US 6097835	A	20000801	US 97898814	A	19970723	200061 B

Priority Applications (No Type Date): US 97898814 A 19970723

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6097835	A		9	G06K-009/00	

**High resolution panchromatic imagery and low resolution multispectral imagery combining method for earth mapping, involves performing pixel by pixel processing of collected imageries to produce sharpened image**

Abstract (Basic):

... The collected multispectral **image** intensities are spatially resampled to panchromatic **image resolution** and projected on hyperplane to **adjust** intensities to closest global model intensity contained in hyperplane to produce synthesized multispectral **image** sharpened to spatial **resolution** of panchromatic **imagery** . The **imagery** is sharpened in several spectral bands as an ensemble.

... The high **resolution** panchromatic **imagery** and low **resolution** multispectral **imagery** are collected and initialized to produce global model relating spatially **overlapping** multispectral and panchromatic intensities. The initializing is done by generated uniformly distributed registered panchromatic and multispectral **image** samples from collected **imagery** and **determining** color weights from generated **image** samples in the form of weighting factory, normal to panchromatic hyperplane containing multispectral **imagery** intensity **vectors** . An INDEPENDENT CLAIM is also included for high **resolution** panchromatic **imagery** and low **resolution** multispectral **imagery** combining apparatus...

...Used for generating multispectral products using Lockheed Martin Commercial Remote Sensing System (CRSS) **imagery** for mapping of earth

...

...Sharpening of **image** in several spectral bands as an ensemble rather than sharpening **images** sequentially band by band reduces amount of processing required and reduces time required for sharpening of multispectral **imagery** .

...

...The figure shows the projection of resampled multispectral **pixel** onto panchromatic **imagery** .

...Title Terms: **RESOLUTION** ;

International Patent Class (Additional): **H04N-007/18**

**24/3,K/3 (Item 3 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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011346556 \*\*Image available\*\*

WPI Acc No: 1997-324461/199730

XRPX Acc No: N97-268599

Character output unit e.g. printer - performs pixel density



**correction of overlapped or mutually touching correction pixels**

Patent Assignee: BROTHER KOGYO KK (BRER )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9127927	A	19970516	JP 95303435	A	19951027	199730 B
JP 3350324	B2	20021125	JP 95303435	A	19951027	200301

Priority Applications (No Type Date): JP 95303435 A 19951027

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9127927	A	14	G09G-005/24		
JP 3350324	B2	13	G09G-005/24		Previous Publ. patent JP 9127927

**Character output unit e.g. printer...**

**...performs pixel density correction of overlapped or mutually touching correction pixels**

**...Abstract (Basic):** The **character** output unit (1) has a CPU (5) to perform **pixel** density processing. The CPU consists of a density setting unit, a density correction unit, a correction **pixel determination** unit and a correction prohibition unit. A contour which is formed from the outline data, is completely scanned in a predetermined manner. The contour specifies the **character** dimensions with respect to a **pixel** co-ordinate system. The density setting unit terms the number of **pixels** present inside the outline area as first density. The remaining **pixels** form second density. An error occurs when two **pixel** areas **overlap** or touch one another...

**...The correction pixel determination unit determines the pixels** which require density correction. The correction **pixels** are stored in an elimination list memory unit (7e) of a RAM (7). The density correction unit **converts** the correction **pixels** into second density. If the outline area formation length is less than predetermined value, **pixel** density correction is prevented by the correction prohibition unit. The information on the corrected **pixels** forms the **image** data, which is output as a **character** .

**...ADVANTAGE - Reduces image distortion. Increases character resolution . Improves precision of conversion .**

Title Terms: **CHARACTER ;**

International Patent Class (Additional): **B41J-002/485 ...**

**... G06F-003/12**

**24/3,K/4 (Item 4 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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010668860 **\*\*Image available\*\***

WPI Acc No: 1996-165814/199617

XRPX Acc No: N96-139356

**Image processor for digital electrophotography copier, or heat transfer printer - performs digitisation processing based on variable threshold value and concerned pixel output density**

Patent Assignee: BROTHER KOGYO KK (BRER )

Inventor: NOMURA M

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8046784	A	19960216	JP 94175311	A	19940727	199617 B
US 5661570	A	19970826	US 95506567	A	19950725	199740

Priority Applications (No Type Date): JP 94175311 A 19940727

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8046784	A		12	H04N-001/403	
US 5661570	A		27	H04N-001/405	

Image processor for digital electrophotography copier, or heat transfer printer...

...performs digitisation processing based on variable threshold value and concerned pixel output density

...Abstract (Basic): The image processor digitises half tone image and produces image data with pseudo half tone . Error diffusion technique is adopted, thereby distributing errors to the surrounding pixels . The errors are generated when digitising the image .

...

...The threshold value (Tvar) for image digitisation, is computed based on the concerned pixel input density value (I). The correction density (I') is obtained by adding error sum (E...

...This value and the threshold value are compared and thus output density value (O) is determined . Finally, digitisation processing is carried out...

...USE/ADVANTAGE - In ink jet type printer. Produces image data even if image data changes abruptly

...Abstract (Equivalent): An image -data processing apparatus for processing multilevel image data representing a half- tone image , into bilevel image data representing a bilevel image corresponding to the half- tone image , the multilevel image data comprising a number of sets of multilevel pixel data each set of which represents one of more than two color values as a first color value indicating a color of a corresponding one of a number of pixels of the half- tone image , and is processed into a corresponding one of a number of sets of bilevel pixel data of the bilevel image data so that said corresponding one set of bilevel pixel data represents one of two color values as a second color value indicating a color of a corresponding one of a number of pixels of the bilevel image , the apparatus comprising...

...data obtaining means for obtaining said multilevel image data; and...

...data processing means for processing said each set of multilevel pixel data into said corresponding one set of bilevel pixel data, by an error diffusion process wherein an error value occurring in processing said each set of multilevel pixel data into said corresponding one set of bilevel pixel data is distributed to at least one first pixel which neighbors said corresponding one pixel of the half- tone image and corresponds to at least one set of multilevel pixel data yet to be processed by said data processing means, said data processing means processing said each set of multilevel pixel data into said corresponding one set of bilevel pixel data, by employing a threshold value which is variable depending upon said each set of multilevel

pixel data...

...said data processing means comprises means for employing said variable threshold value when said first **color** value falls within a first range of said more than two **color** values, and employing, in place of said variable threshold value, a predetermined threshold value when said first **color** value falls within a second range of said more than two **color** values which does not **overlap** said first range...

Title Terms: **IMAGE** ;

International Patent Class (Main): **H04N-001/403** ...

... **H04N-001/405**

International Patent Class (Additional): **B41J-002/52**....

... **G06T-005/00**

**24/3,K/5** (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009873825 \*\*Image available\*\*

WPI Acc No: 1994-153738/199419

XRPX Acc No: N94-120743

**Colour error diffusion circuit - has colour signal input to colour determiner after RGB to CMY conversion from image processor, and output half- tone colour signal selected to have smallest possible error.**

Patent Assignee: SAMSUNG ELECTRONICS CO LTD (SMSU ); SAMSUNG ELECTRONICS CO (SMSU )

Inventor: KIM S; KIM Y; KIM S K; KIM Y S

Number of Countries: 007 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2273017	A	19940601	GB 9323959	A	19931122	199419 B
FR 2698507	A1	19940527	FR 9314089	A	19931125	199424
DE 4340217	A1	19940630	DE 4340217	A	19931125	199427
JP 6225171	A	19940812	JP 93296190	A	19931126	199437
US 5375002	A	19941220	US 93157270	A	19931126	199505
TW 247386	A	19950511	TW 93110609	A	19931214	199530
GB 2273017	B	19961106	GB 9323959	A	19931122	199648
KR 9605016	B1	19960418	KR 9222453	A	19921126	199915
DE 4340217	C2	19990325	DE 4340217	A	19931125	199916

Priority Applications (No Type Date): KR 9222453 A 19921126

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2273017	A		26	H04N-001/46	
DE 4340217	A1		11	G06K-015/22	
JP 6225171	A		7	H04N-001/46	
US 5375002	A		12	H04N-001/40	
GB 2273017	B		1	H04N-001/60	
FR 2698507	A1			H04N-001/46	
TW 247386	A			H04N-001/00	
KR 9605016	B1			B41J-002/435	
DE 4340217	C2			H04N-001/52	

**Colour error diffusion circuit...**

...has colour signal input to colour determiner after RGB to CMY conversion from image processor, and output half- tone colour

signal selected to have smallest possible error.

...Abstract (Basic): The error diffusion circuit has a **colour determiner** (205) for adding CMY signals, generated from a **colour** printer from scanned (201) RGB signals, to a diffusion error to generate a current **pixel** value. The **pixel** value is sequentially compared with supplied look-up data to **determine** an address of error look-up data having the smallest error as output **pixel colour** information. An error memory (207) stores the smallest error out of the errors calculated from the **colour determiner** as an error for a current **pixel**. The stored error is read out when a next **pixel** is processed...

...The read error is provided as neighbouring **pixel** information to the **colour determiner** to generate the diffusion error. A neighbouring **pixel colour** information memory (204) stores the output **pixel colour** information of the next **pixel**. An error look-up table memory (203) stores error values generated when printing an input **pixel** according to the output **pixel colour** information and provides the error values as the look-up error data to the **colour determiner**. The error look-up table memory is accessed by the neighbouring **pixel colour** information...

...ADVANTAGE - Compensates for ink bleed and **overlap** of **colour** between adjacent dots. May be calibrated for any printer...

...Abstract (Equivalent): An error diffusion circuit for a **colour image** printer having a circuit for receiving R-G-B (red-green-blue) signals and **converting** said R-G-B signals into C-M-Y (cyan-magenta-yellow) signals, said error diffusion circuit comprising: **colour determining** means for adding said C-M-Y signals to a diffusion error to generate a current **pixel** value, comparing said current **pixel** value with sequentially supplied error look-up data to **determine** an address of error look-up data having the smallest error as output **pixel colour** information, and applying said output **pixel colour** information to said printer, error storage means for storing the smallest error out of errors calculated from said **colour determining** means as an error for a current **pixel**, reading out the stored error when a next **pixel** is processed, and providing the read error as neighbouring **pixel** error information to said **colour determining** means so as to generate said diffusion error; neighbouring **pixel colour** information storage means for storing said output **pixel colour** information as neighbouring **pixel colour** information of the next **pixel**; and error look-up table storage means for storing error values generated when printing an input **pixel** according to said output **pixel colour** information and providing said error values as said error look-up data to said **colour determining** means, said error look-up table storage means being accessed by said neighbouring **pixel colour** information...

...Abstract (Equivalent): A circuit, scanning **colour** documents and generating C-M-Y (cyan-magenta-yellow) signals from an input **pixel**, includes a **colour determining** portion for adding the C-M-Y signals to a diffusion error to generate a current **pixel** value. The current **pixel** value is compared with sequentially supplied error look-up data to **determine** an address of error look-up data having the smallest error as output **pixel colour** information, this information being applied to the printer...

...An error storage portion, storing the smallest error out of errors calculated from the **colour determining** portion as an error for a current **pixel**, reads out the stored error when a next **pixel** is

processed, and provides the read error as neighbouring **pixel** error information to the **colour determining** portion to generate the diffusion error...

...USE - Compensating for ink bleed and **overlap** of **colour** between neighbouring **pixel** and current **pixel** . Compensating for printing characteristics of printer...

Title Terms: **COLOUR** ;

International Patent Class (Main): **B41J-002/435** ...

... **H04N-001/00** ...

... **H04N-001/40** ...

... **H04N-001/46** ...

... **H04N-001/52** ...

... **H04N-001/60**

International Patent Class (Additional): **B41J-002/525** ...

... **B41J-005/30** ...

... **B41J-027/00** ...

... **H04N-001/034**

**24/3,K/6** (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008880489 \*\*Image available\*\*

WPI Acc No: 1992-007760/199201

Related WPI Acc No: 1992-007761; 1992-007762; 1992-007763; 1992-007765;  
1992-007766; 1992-007767; 1992-007768; 1992-007769; 1992-007771;  
1992-007774; 1992-007775; 1992-007776; 1992-007777; 1992-007778;  
1992-007779; 1992-007780; 1993-320203; 1994-144508; 1997-260130

XRPX Acc No: N92-005955

**Vertical zoom and panning system for television - maps adjustable area represented by synchronising signal component then enlarges and uses blanking interval to control displayed part**

Patent Assignee: THOMSON CONSUMER EL (THOH ); THOMSON CONSUMER ELECTRONICS INC (THOH ); RCA THOMSON LICENSING CORP (RADC )

Inventor: ALTMANSHOFER R D; RODRIGUEZ-CAVAZOS E; SAEGER T W; CANFIELD B A; ERSOZ N H; ALTMANSHOFER R; RODRIGUES-CAVAZOS E; KRANAWETTER G A; DUFFIELD D J; FILLIMAN P D; HORLANDER K F; HERSOZ N H; WILLIS D H; CHRISTOPHER T J ; CAVAZOS E R; ROMESBURG E D

Number of Countries: 040 Number of Patents: 060

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9119378	A	19911212	WO 91US3822	A	19910530	199201 B
AU 9181860	A	19911231				199215
CN 1057141	A	19911218	CN 91103732	A	19910531	199236
EP 540548	A1	19930512	EP 91912548	A	19910530	199319
			WO 91US3822	A	19910530	
PT 97819	A	19930630	PT 97819	A	19910531	199329
JP 5507597	W	19931028	JP 91511739	A	19910530	199348
			WO 91US3822	A	19910530	
US 5285282	A	19940208	WO 91US3822	A	19910530	199407

			US 92945641	A	19921106		
TW 223215	A	19940501	TW 91104046	A	19910524	199423	
TW 223728	A	19940511	TW 91104042	A	19910524	199426	
US 5345270	A	19940906	US 92817236	A	19920106	199435	
			US 9363480	A	19930519		
US 5351135	A	19940927	US 92817236	A	19920106	199438	
			US 9357026	A	19930505		
EP 624031	A2	19941109	EP 94106790	A	19940430	199443	N
EP 625852	A2	19941123	EP 94107581	A	19940517	199445	N
JP 6334936	A	19941202	JP 94126681	A	19940502	199508	N
JP 7050779	A	19950221	JP 94137753	A	19940518	199517	
TW 243575	A	19950321	TW 91104060	A	19910524	199522	
US 5420643	A	19950530	US 92938226	A	19921026	199527	
			US 94250998	A	19940531		
EP 624031	A3	19950118	EP 94106790	A	19940430	199538	N
EP 625852	A3	19950118	EP 94107581	A	19940517	199538	N
TW 252257	A	19950721	TW 91104039	A	19910524	199539	
TW 285810	A	19960911	TW 94100820	A	19940201	199704	N
TW 297201	A	19970201	TW 94100822	A	19940201	199720	N
EP 540548	B1	19970423	EP 91912548	A	19910530	199721	
			WO 91US3822	A	19910530		
CN 1100580	A	19950322	CN 94104784	A	19940504	199723	N
DE 69125834	E	19970528	DE 625834	A	19910530	199727	
			EP 91912548	A	19910530		
			WO 91US3822	A	19910530		
ES 2100232	T3	19970616	EP 91912548	A	19910530	199731	
EP 831645	A1	19980325	EP 91910567	A	19910529	199816	
			EP 97120599	A	19910529		
MX 185491	B	19970801	MX 943713	A	19940519	199847	
JP 11008799	A	19990112	JP 91510297	A	19910529	199912	N
			JP 98161165	A	19910529		
SG 64303	A1	19990427	SG 961999	A	19940430	199933	N
SG 64872	A1	19990525	SG 962379	A	19910530	199934	
MX 187483	B	19971215	MX 943369	A	19940506	199936	N
SG 66746	A1	19990817	SG 962451	A	19910529	199938	
EP 625852	B1	19990825	EP 94107581	A	19940517	199939	N
DE 69420182	E	19990930	DE 620182	A	19940517	199946	N
			EP 94107581	A	19940517		
ES 2134876	T3	19991016	EP 94107581	A	19940517	199950	
JP 2979497	B2	19991115	JP 94126681	A	19940502	199954	N
RU 2119187	C1	19980920	RU 9216547	A	19910529	200008	
EP 624031	B1	20000621	EP 94106790	A	19940430	200033	N
EP 831645	B1	20000816	EP 91910567	A	19910529	200040	
			EP 97120599	A	19910529		
DE 69424973	E	20000727	DE 624973	A	19940430	200042	N
			EP 94106790	A	19940430		
ES 2146625	T3	20000816	EP 94106790	A	19940430	200044	N
KR 183367	B1	19990501	KR 92703032	A	19921130	200052	
DE 69132376	E	20000921	DE 632376	A	19910529	200055	
			EP 97120599	A	19910529		
KR 191409	B1	19990615	KR 92703024	A	19921130	200056	
SG 75762	A1	20001024	SG 962431	A	19910530	200060	
KR 202157	B1	19990615	KR 92703040	A	19921130	200061	
KR 229292	B1	19991101	WO 91US3739	A	19910529	200110	
			KR 92703026	A	19921130		
			KR 98708521	A	19981019		
SG 79895	A1	20010417	SG 962460	A	19910529	200128	
SG 80522	A1	20010522	SG 962471	A	19910529	200134	
EP 1130909	A2	20010905	EP 91910878	A	19910529	200151	
			EP 2001111808	A	19910529		
SG 82550	A1	20010821	SG 968487	A	19910529	200158	

JP 3228420	B2	20011112	JP 91510650	A	19910529	200174
			WO 91US3733	A	19910529	
DE 69132822	E	20020103	DE 632822	A	19910529	200210
			EP 91910878	A	19910529	
			WO 91US3741	A	19910529	
JP 2002125171	A	20020426	JP 91510650	A	19910529	200231
			JP 2001228467	A	19910529	
JP 3298876	B2	20020708	JP 91511738	A	19910530	200247
			WO 91US3816	A	19910530	
SG 91239	A1	20020917	SG 962341	A	19910530	200278
JP 3354927	B2	20021209	JP 91510476	A	19910530	200301
			WO 91US3815	A	19910530	
JP 3373509	B2	20030204	JP 91511731	A	19910529	200317
			WO 91US3746	A	19910529	
SG 96156	A1	20030523	SG 962264	A	19910529	200347

Priority Applications (No Type Date): GB 9012326 A 19900601; EP 94106790 A 19940430; EP 94107581 A 19940517; JP 94126681 A 19940502; TW 94100820 A 19940201; TW 94100822 A 19940201; CN 94104784 A 19940504; JP 98161165 A 19910529; SG 961999 A 19940430; MX 943369 A 19940506; DE 620182 A 19940517; DE 624973 A 19940430

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9119378	A				
Designated States (National): AU BB BG BR CA FI HU JP KP KR LK MC MG MW NO PL RO SD SU					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU NL OA SE US					
CN 1057141	A			H04N-003/223	
EP 540548	A1 E	44		H04N-003/223	Based on patent WO 9119378
Designated States (Regional): DE ES FR GB IT					
PT 97819	A			H04N-000/00	
JP 5507597	W			H04N-005/262	Based on patent WO 9119378
US 5285282	A	24		H04N-003/223	
TW 223215	A			H04N-009/77	
TW 223728	A			H04N-003/223	
US 5345270	A	10		H04N-007/04	CIP of application US 92817236
					CIP of patent US 5249049
US 5351135	A	10		H04N-007/04	CIP of application US 92817236
					CIP of patent US 5249049
EP 624031	A2 E	15		H04N-007/00	
Designated States (Regional): DE ES FR GB IT					
EP 625852	A2 E			H04N-007/00	
Designated States (Regional): DE ES FR GB IT					
JP 6334936	A	9		H04N-005/46	
JP 7050779	A	10		H04N-005/262	
TW 243575	A			H04N-001/387	
US 5420643	A	29		H04N-005/262	Cont of application US 92938226
TW 252257	A			H04N-001/41	
TW 285810	A			H04N-009/00	
TW 297201	A			H04N-011/00	
EP 540548	B1 E	27		H04N-003/223	Based on patent WO 9119378
Designated States (Regional): DE ES FR GB IT					
CN 1100580	A			H04N-005/445	
DE 69125834	E			H04N-003/223	Based on patent EP 540548
					Based on patent WO 9119378
ES 2100232	T3			H04N-003/223	Based on patent EP 540548
EP 831645	A1 E	28		H04N-005/44	Div ex application EP 91910567
					Div ex patent EP 532583
Designated States (Regional): DE ES FR GB IT					
MX 185491	B			H04N-007/004	

JP 11008799	A	24	H04N-005/262	Div ex application JP 91510297
SG 64303	A1		H04N-007/00	
SG 64872	A1		H04N-005/262	
MX 187483	B		H04N-007/004	
SG 66746	A1		H04N-003/223	
EP 625852	B1 E		H04N-007/00	
Designated States (Regional): DE ES FR GB IT				
DE 69420182	E		H04N-007/00	Based on patent EP 625852
ES 2134876	T3		H04N-007/00	Based on patent EP 625852
JP 2979497	B2	9	H04N-005/46	Previous Publ. patent JP 6334936
RU 2119187	C1		G06F-003/00	
EP 624031	B1 E		H04N-007/00	
Designated States (Regional): DE ES FR GB IT				
EP 831645	B1 E		H04N-005/44	Div ex application EP 91910567
Div ex patent EP 532583				
Designated States (Regional): DE ES FR GB IT				
DE 69424973	E		H04N-007/00	Based on patent EP 624031
ES 2146625	T3		H04N-007/00	Based on patent EP 624031
KR 183367	B1		H04N-007/01	
DE 69132376	E		H04N-005/44	Based on patent EP 831645
KR 191409	B1		H04N-007/01	
SG 75762	A1		H04N-005/45	
KR 202157	B1		H04N-003/223	
KR 229292	B1		H04N-007/01	Div ex application KR 92703026
SG 79895	A1		H04N-005/06	
SG 80522	A1		H04N-005/46	
EP 1130909	A2 E		H04N-005/44	Div ex application EP 91910878
Div ex patent EP 533748				
Designated States (Regional): DE ES FR GB IT				
SG 82550	A1		H04N-007/01	
JP 3228420	B2	26	H04N-005/45	Previous Publ. patent JP 5508522
Based on patent WO 9119384				
DE 69132822	E		H04N-005/262	Based on patent EP 533748
Based on patent WO 9119385				
JP 2002125171	A	23	H04N-005/45	Div ex application JP 91510650
JP 3298876	B2	30	H04N-005/262	Previous Publ. patent JP 5508065
Based on patent WO 9119387				
SG 91239	A1		H04N-007/12	
JP 3354927	B2	30	H04N-005/262	Previous Publ. patent JP 5507822
Based on patent WO 9119386				
JP 3373509	B2	34	H04N-005/262	Previous Publ. patent JP 5507596
Based on patent WO 9119397				
SG 96156	A1		H04N-005/46	

... maps adjustable area represented by synchronising signal component then enlarges and uses blanking interval to control displayed...

...Abstract (Basic): display system has a video display, and a circuit for mapping on the display an adjustable picture display area represented in a video signal having a synchronising component. A circuit selectively enlarges...

...a blanking interval relative to the synchronising component to control which portion of the enlarged picture area is displayed and which portion is not displayed...

...USE/ADVANTAGE - With wide format display televisions capable of providing high resolution, single and multiple picture displays from single and multiple asynchronous sources, having similar or different format ratios, and with...

...Abstract (Equivalent): source (ANT1,ANT2,AUX1,AUX2) of a first video



signal (YMN) representative of a first **picture** , first signal processing means (304) for speeding up the first video signal, a second source (ANT1,ANT2,AUX1,AUX2) of a second video signal (YAUX) representative of a second **picture** , video display means (244) synchronised with the first and second video signals, second signal processing...

...and second processed video signals for side-by-side display of the first and second **pictures** , the side-by-side **pictures** being of substantially comparable size, characterised by the first and second **pictures** having first and second display format ratios respectively (e.g. 4:3) the video display...

...signals by reducing the second display format ratio, and each of the first and second **pictures** being controlled in **picture** size and **image** aspect ratio as displayed by the first and second signal processing means respectively...

...comprising: video display means (244); means for mapping on said video display means (244) an **adjustable picture** display area represented in a video signal (YMN) having a synchronising component (VSYNC); means (50) for selectively enlarging said **picture** display area to be greater than said video display means (244) in at least one...

...interval (VBLNK) relative to said synchronising component (VSYNC) to control which portion of said enlarged **picture** area is displayed and which portion is not displayed...

...Abstract (Equivalent): The video display system comprises analogue to digital **converters** for quantizing first and second video signals, representing first and second **pictures** respectively, at higher and lower levels of quantization **resolution** relative to one another. The analogue to digital **converters** can operate at different sampling rates. The **picture** represented in the lower sampling rate signal can have the appearance of being subsampled, relative to the other **picture** . A video display is synchronized with the first video signal. The second video signal is...

...A signal processing circuit **modifies** the first and second video signals to represent the first and second **pictures** respectively in sizes smaller than the video display. A multiplexing circuit combines the processed video signals for side-by-side display of the **pictures** . A quantization **resolution** enhancing circuit improves the perceived quality of the video signal having the lower level of quantization **resolution** .

...

...ADVANTAGE - Side by side **pictures** can displayed without **image** aspect ratio distortion, as well as with different relative amounts of cropping and **image** aspect ratio distortion...USE/ADVANTAGE - **Picture overlay** system which assures proper **image** aspect ratios for **picture overlays** .

...

...The system comprises a video display having a wide format display ratio, and a letterbox **detector** for sampling video information in **pictures** represented by input video signals having a letterbox format. It generates a control signal for enlarging the **pictures** for substantially filling the video display with active video...

...A first control circuit restricts operation of the letterbox **detector**

to a vertical range of horizontal lines in each field of the video signal. A second control circuit restricts operation of the letterbox **detector** to a horizontal range of video data in each of the horizontal lines...

...display control system comprises a video display having a wide format display ratio, a letterbox **detector** for sampling video information in **pictures** represented by input video signals having a letterbox format and generating a control signal for enlarging the **pictures** for filling the video display device with active video, the letterbox format **pictures** sometimes having auxiliary information disposed in ...A circuit is provided for preventing the letterbox **detector** from sampling the video information in any portion of the border area in which the...

...USE - Automatic **detectors** for letterbox video sources, eg as would be useful in wide screen televisions...

...reading or writing of the line memory is to begin, with a second value, fixing **pixel** location within each line period. A register stores the number of data samples stored in...ratio. A circuit, for example one generating a raster, maps on the video display an **adjustable picture** display area represented in a video signal having a vertical synchronizing component. The **picture** represented in the video signal has a second format display ratio. A vertical height control circuit selectively enlarges the **picture** display area relative to the video display...

...A panning control circuit **adjusts** in phase a vertical blanking interval relative to the vertical synchronizing component to control which portion of the enlarged **picture** area is displayed and which portion is not displayed. The format display ratios can be...

...or different, for example 16multiplied by 9 for the video display and 4multiplied by 3 for the **picture**, in the latter case...

...A control circuit controls the mapping circuit, the signal processors and the selecting circuit to **adjust** in format display ratio and **image** aspect ratio each **picture** represented in the output video signal. One of the different format display ratios of the...

...ADVANTAGE - TV is capable of providing high **resolution**, single and multiple **picture** displays from single and multiple sources having similar or different format ratios...The **picture overlay** display system includes a video memory and a control circuit for writing and reading information...

...ADVANTAGE - Assures proper size and placement of **picture overlays** in simultaneous **picture** displays...

...A circuit for compressing and expanding video **colour** component data comprises a FIFO line memory and a delay circuit. A timing circuit generates...

...Title Terms: **ADJUST** ;

International Patent Class (Main): G06F-003/00 ...

... H04N-000/00 ...

... H04N-001/387 ...

... H04N-001/41 ...

... H04N-003/223 ...  
 ... H04N-005/06 ...  
 ... H04N-005/262 ...  
 ... H04N-005/44 ...  
 ... H04N-005/445 ...  
 ... H04N-005/45 ...  
 ... H04N-005/46 ...  
 ... H04N-007/00 ...  
 ... H04N-007/004 ...  
 ... H04N-007/01 ...  
 ... H04N-007/04 ...  
 ... H04N-007/12 ...  
 ... H04N-009/00 ...  
 ... H04N-009/77 ...  
 ... H04N-011/00  
 International Patent Class (Additional): G06F-015/62 ...  
 ... H04N-001/40 ...  
 ... H04N-003/22 ...  
 ... H04N-003/24 ...  
 ... H04N-003/27 ...  
 ... H04N-005/04 ...  
 ... H04N-005/26 ...  
 ... H04N-005/265 ...  
 ... H04N-005/272 ...  
 ... H04N-005/278 ...  
 ... H04N-007/008 ...  
 ... H04N-007/08 ...  
 ... H04N-009/74 ...  
 ... H04N-011/06

008607119      \*\*Image available\*\*  
WPI Acc No: 1991-111149/199116  
XRPX Acc No: N91-085742

**Electrophotographically recording colour image from video signal -  
using video signal portions extended so toner images are extended to  
prevent gaps between different colour areas**

Patent Assignee: HITACHI LTD (HITA )

Inventor: SAITOH M; TADOKORO H

Number of Countries: 010    Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 422602	A	19910417	EP 90119397	A	19901010	199116 B
JP 3126396	A	19910529	JP 89264002	A	19891012	199128
EP 422602	A3	19920513	EP 90119397	A	19901010	199330
US 5386223	A	19950131	US 90594976	A	19901010	199511
			US 934647	A	19930114	
EP 422602	B1	19950809	EP 90119397	A	19901010	199536
DE 69021483	E	19950914	DE 621483	A	19901010	199542
			EP 90119397	A	19901010	

Priority Applications (No Type Date): JP 89264002 A 19891012

Patent Details:

Patent No    Kind    Lan    Pg    Main    IPC    Filing    Notes

EP 422602      A

Designated States (Regional): CH DE FR GB IT LI NL SE

US 5386223      A      16    G01D-015/06    Cont of application US 90594976

EP 422602      B1 E    19    H04N-001/46

Designated States (Regional): DE FR GB

DE 69021483      E      H04N-001/46    Based on patent EP 422602

**Electrophotographically recording colour image from video signal...**

**...using video signal portions extended so toner images are extended to  
prevent gaps between different colour areas**

...Abstract (Basic): The apparatus is for recording a **colour image** so that two **toner images** of different **colours** are formed on the basis of video signals supplied from an information processor (140). The **toner images** are transferred to a sheet of recording paper (41) so as to **overlap** each other. A video signal memory stores signals supplied from the information processor...

...A contiguous **pixel pair detector** extracts video signal portions which form contiguous **toner images** (72a,73a) of different **colours** at a recording position, from the stored video signals. A video signal **modifying** circuit extends one of the video signal portions so that its **image** is enlarged in the direction of the boundary between the contiguous **images** to **modify** video signal(s) in the memory...

...ADVANTAGE - A gap having the ground **colour** of recording paper is never generated between two **images** of different **colours** which are to be contiguous to each other. (18pp Dwg.No.2/9)

...Abstract (Equivalent): The apparatus is for recording a **colour image** so that two **toner images** of different **colours** are formed on the basis of video signals supplied from an information processor (140). The **toner images** are transferred to a sheet of recording paper (41) so as to **overlap** each other. A video signal memory stores signals supplied from the information processor...

...A contiguous **pixel pair detector** extracts video signal portions which form contiguous **toner images** (72a,73a) of different **colours** at a recording position, from the stored video signals. A video signal **modifying** circuit extends one of the video signal portions so that its **image** is enlarged in the direction of the boundary between the contiguous **images** to **modify** video signal(s) in the memory...

...ADVANTAGE - A gap having the ground **colour** of recording paper is never generated between two **images** of different **colours** which are to be contiguous to each other. (18pp Dwg.No.2/9...

...EP-422602 A method of recording a **color image** in such a manner that two **toner images** of different **colors** are formed on the basis of video signals supplied from an information processor (40) for producing different **colors**, and the **toner images** are transferred to a sheet of recording paper (41) so that the **toner images** **overlap** each other, to form the **color image**, the method comprising the steps of: storing video signals representing **color image** data of a first **color image** in a first video signal storing means; storing video signals representing **color image** data of a second **color image** in a second video signal storing means; extracting from said first video signal storing means a video signal portion of said first **color image** which represents a part of said first **color image** which is contiguous to a boundary of said first and second **color images**; extending the extracted video signal portion so as to enlarge it by a predetermined amount...

...signal portion in said first video signal storing means as a part of said first **color images**; and reading out said first and second **color images** from said first and second video signal storing means for recording said first and second **color images** as **toner images** on recording paper so that said **toner images** at least partially **overlap** each other...

...Abstract (Equivalent): video signal storing units stores first and second video signals in a form of a **pixel bit map** representing **colour image** data of a first and second **colour images**. A contiguous **pixel pair detector** is coupled to the first and second video signal-storing units for extracting a video signal portion of the first **colour image**, which video signal portion represents a part of the first **colour image** which is contiguous to a boundary of the first and second **colour images**.

...

...Video signal **modifies** is coupled to the contiguous **pixel pair detector** for extending the extracted video signal portion of the first **colour image**, so as to enlarge then video signal portion by a predetermined amount in a direction...

...and second video signals and the extended video signal portion stored in to the two- **colour image** recording device for recording the first and second **colour images** on recording paper so as to at least partially **overlap** each other...

...ADVANTAGE - So that a gap having the base **colour** of recording paper is never generated between two **images** of different **colours** which are to be contiguous to each other, and to provide an apparatus for realizing

...Title Terms: **COLOUR** ;

...International Patent Class (Additional): H04N-001/46 ...

... H04N-005/272 ...

... H04N-009/79

24/3,K/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008490941 \*\*Image available\*\*

WPI Acc No: 1990-377941/199051

XRFX Acc No: N90-288037

**Generating binary representation of image - allocates one of two colours to each pixel in pixel group, after determining required numbers**

Patent Assignee: CROSFIELD ELECTRONICS LTD (CROE )

Inventor: ROE M D; ROE M D M

Number of Countries: 004 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 403226	A	19901219	EP 90306387	A	19900612	199051 B
JP 3114365	A	19910515	JP 90152925	A	19900613	199126
US 5121223	A	19920609	US 90537734	A	19900614	199226
EP 403226	B1	19941130	EP 90306387	A	19900612	199501
DE 69014425	E	19950112	DE 614425	A	19900612	199507
			EP 90306387	A	19900612	

Priority Applications (No Type Date): GB 8913680 A 19890614

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EP 403226 A

Designated States (Regional): DE GB

US 5121223 A 8 H04N-001/387

EP 403226 B1 E 12 H04N-001/40

Designated States (Regional): DE GB

DE 69014425 E H04N-001/40 Based on patent EP 403226

**Generating binary representation of image - ...**

**...allocates one of two colours to each pixel in pixel group, after determining required numbers**

...Abstract (Basic): The method has an **image** scanned by input device (1) read in **pixel** groups into a RAM (3) and sampled by a CPU (4). Each **pixel** is allocated one of two **colours** according to an algorithm performed by the CPU. The transformed **pixel** group is then stored in a second RAM...

...A **colour** value is obtained for each **pixel** and **modified** into a unique value according to its group position. One **colour** is assigned to a calculated number of higher value **pixels** with the remaining **pixels** being assigned the second **colour**, transforming each **pixel** group into a binary representation...

...Abstract (Equivalent): A method for generating a binary representation of an **image** represented in half- **tone** form, in which the **image** is scanned and sampled to obtain a **colour** value representing the **colour** component content of each sampled **pixel**, and in which each **pixel** corresp. to a sample of the **image** is assigned one of two **colours** (W,B), the method comprising, for each group of abutting and non-**overlapping** sampled **pixels**, **determining** (13) the number (J) of

**pixels** in the group which are to be assigned to each of the two **colours** ; allocating (15) a unique sequence to the **pixels** ; and assigning (16,17) one of the two **colours** to **pixels** in sequential order according to the unique sequence until the predetermined number of **pixels** of that **colour** has been assigned and thereafter assigning the other **colour** to the remaining **pixels** in the group, wherein each sampled **pixel** has a **colour** content represented by a grey scale value where the grey scale is one of a finite number of steps between the **colour** values of white and black, and wherein the allocating step (15) comprises **modifying** the sampled grey scale value associated with each **pixel** within the group by adding respective unique values to each grey scale value; wherein the one of the two **colours** is assigned to **pixels** in sequential order of **modified** grey level value according to the unique sequence until the predetermined number of **pixels** of that **colour** has been assigned (16) and the other **colour** is assigned to the remaining **pixels** in the group thereafter (17); characterised in that each unique value has a magnitude less than the value of one step in the grey scale; whereby each unique value **modifies** its respective grey scale value such that no two **modified** grey scale values are the same...

...Abstract (Equivalent): The **image** is scanned and sampled, and each **pixel** corresp. to a sample of the **image** is assigned one of two **colours** . For each group of abutting and non- **overlapping** sampled **pixels** , the number of **pixels** in the group which are to be assigned to each of the two **colours** is **determined** (step 13). A unique sequence is allocated to the **pixels** (step 15); and one of the two **colours** is assigned to **pixels** in sequential order until the predetermined number of **pixels** of that **colour** has been assigned (step 16). Thereafter the other **colour** is assigned to the remaining **pixels** in the group (step 17). USE - For facsimile, for generating binary representation of **image** represented in half- **tone** form...

...Title Terms: **IMAGE** ;

International Patent Class (Main): **H04N-001/387** ...

... **H04N-001/40**

International Patent Class (Additional): **G06F-015/68**

**24/3,K/9** (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008456379 \*\*Image available\*\*

WPI Acc No: 1990-343379/199046

Related WPI Acc No: 1990-343380; 1990-343384

XRPX Acc No: N95-048183

**Digital colour image processing system - controls processing unit to preferentially execute high- resolution processing for area where colour and binary images overlap each other**

Patent Assignee: CANON KK (CANO )

Inventor: ICHIKAWA H; IKEDA Y; KITAMURA T; KURITA M; SUZUKI Y; KATO K; KATOH K

Number of Countries: 006 Number of Patents: 018

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 397428	A	19901114	EP 90304905	A	19900504	199046 B
JP 2294161	A	19901205	JP 89115685	A	19890508	199104
JP 2294880	A	19901205				199104
JP 2295344	A	19901206	JP 89117001	A	19890510	199104

JP 2295353	A	19901206	JP 89117054	A	19890510	199104
JP 3072780	A	19910327				199119
JP 3072781	A	19910327	JP 89296788	A	19891114	199119
US 5206719	A	19930427	US 90519272	A	19900504	199318
EP 397428	A3	19920610	EP 90304905	A	19900504	199332
EP 397433	A3	19920805	EP 90304914	A	19900504	199336
US 5381248	A	19950110	US 90519498	A	19900504	199508
			US 93117657	A	19930908	
EP 397428	B1	19970129	EP 90304905	A	19900504	199710
DE 69029821	E	19970313	DE 629821	A	19900504	199716
			EP 90304905	A	19900504	
US 5617224	A	19970401	US 90519840	A	19900504	199719
			US 92936723	A	19920831	
			US 94191146	A	19940203	
EP 397433	B1	19970416	EP 90304914	A	19900504	199720
JP 9172544	A	19970630	JP 89296788	A	19891114	199736
			JP 96303030	A	19891114	
US 5940192	A	19990817	US 90519840	A	19900504	199939
			US 92936723	A	19920831	
			US 94191146	A	19940203	
			US 95477544	A	19950607	
JP 3015308	B2	20000306	JP 89296788	A	19891114	200016
			JP 96303030	A	19891114	

Priority Applications (No Type Date): JP 89296788 A 19891114; JP 89115685 A 19890508; JP 89117001 A 19890510; JP 89117007 A 19890510; JP 89117010 A 19890510; JP 89117054 A 19890510; JP 89117055 A 19890510; JP 89138941 A 19890531; JP 96303030 A 19891114

#### Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 397428	A		156		
Designated States (Regional): FR GB IT					
JP 3015308	B2		73	H04N-001/40	Div ex application JP 89296788 Previous Publ. patent JP 9172544
US 5206719	A		156	H04N-001/46	
EP 397428	A3		156		
EP 397433	A3		156		
US 5381248	A		146	H04N-001/46	Cont of application US 90519498
EP 397428	B1 E		153	H04N-001/387	
Designated States (Regional): DE FR GB IT					
DE 69029821	E			H04N-001/387	Based on patent EP 397428
US 5617224	A		156	H04N-001/58	Cont of application US 90519840 Cont of application US 92936723
EP 397433	B1 E		169	H04N-001/387	
Designated States (Regional): DE FR GB IT					
JP 9172544	A		73	H04N-001/40	Div ex application JP 89296788
US 5940192	A			H04N-001/46	Cont of application US 90519840 Cont of application US 92936723 Div ex application US 94191146 Div ex patent US 5617224

**Digital colour image processing system...**

**...controls processing unit to preferentially execute high- resolution processing for area where colour and binary images overlap each other**

**...Abstract (Basic):** The -system includes a device for synthesising a **colour image** and a binary **image** a processor for performing multigradation processing of the **colour image** and high- **resolution** processing of the binary **image** and a device for controlling the



processor to preferentially execute the high- resolution processing for an area where the colour and binary images overlap each other. A device serves for inputting the colour image and comprises a converter for scanning an original and converting an original image into the colour image. A memory stores the binary image and a device binarises the input colour image which is also stored in the memory...

...The synthesiser reads out the binary image from the memory in synchronism with an input of the colour image for executing synthesis. A device forms an image in accordance with an output from the processor. The processor causes the image forming device to increase a printing density of the binary image to be higher than that of the colour image.

...

...ADVANTAGE - Improved reproducibility of black character and simple structure. (156pp Dwg.No.1/76)

...Abstract (Equivalent): A colour image forming apparatus comprising: means (A) for generating colour component data (100-102); processing means (B-G) for processing the colour component data and outputting colour reproduction data (116) as a colour image to be reproduced, said colour reproduction data consisting of a plurality of colour components (yellow, magenta, cyan, black) and the processing means being adapted to output the colour image sequentially in units of frames with each frame being composed of a single colour component; and image forming means (5) connected to the processing means so as to receive the colour reproduction data and form an image on a medium by recording said frames sequentially and in register on the medium; and...

...further includes; process control means (CPU) for setting in said processing means representative values which determine the size of a mosaic block so that the processing means can output to the image forming means a sequence of similar mosaic blocks which are located at consecutive positions across...

...medium and which are identical in size; memory means (404g, 405g, A2304, B2305) for storing colour components for the colour reproduction data to be used in the mosaic blocks as determined by said representative values; and mosaic processing and control means (402, 504g, 505g, 2205) for controlling the storing of the colour components used in the mosaic blocks are determined by said representative values in said memory means in synchronism with a predetermined timing signal (ITOP) so as to maintain registration of the plurality of colour components of the mosaic blocks when they are reproduced as images on said medium, both with regard to the colour components within a mosaic block and with regard to the mosaic blocks within a sequence...

...An image processing apparatus comprising: first input means (A) for inputting first image data representing a first image which can include both halftone and character image portions; second input means (M) for inputting second image data representing a second image; and synthesizing means (F) for synthesizing the first image data and the second image data outputting synthesized image data representing a synthesized image which is a combination of first and second image data, characterised in that the apparatus further comprises: means (I) for detecting character portions in the first image based on the first image data and generating a control signal

(140) for controlling the **resolution** with which the **character** portions of the **image** are reproduced so that the **resolution** with which the **character** portions are reproduced is higher than the **resolution** with which the halftone **image** portions of the **image** are reproduced, and control means (502) for making the control signal non-effective within any region of the synthesized **image** which includes the second **image** .

...Abstract (Equivalent): a) input means for inputting **image** data having a predetermined **resolution** ;

...

...b) processing means for performing mosaic processing and normal processing of the **image** data input of said input means...

...c) reproduction means for reproducing an **image** based on the **image** data subjected to either the mosaic processing or the normal processing by said processing means...

...wherein said processing means, in the mosaic processing mode, divides the input **image** data into a plurality of rectangular block areas and paints each rectangular block area with a uniform **color** based on the **image** data in the rectangular block area so that the **resolution** of the **image** represented by the mosaic-processed **image** data is lower than the predetermined **resolution** without **changing** either a size of the **image** or a number of **pixels** for the **image** , and, in the normal processing mode, outputs processed **image** data so that the **resolution** of the **image** represented by the normal-processed **image** data is the same as the predetermined **resolution** .

...

...The, **image** processing apparatus has a **colour image** signal input and extractor for the outline portion from the **colour image** signal. An output remover the **colour image** signal in an area other than the outline portion and outputs the **colour image** signal representing the extracted outline portion in multi- **colors** based on the input **colour image** signal. ADVANTAGE - Can easily obtain desired outline **image** . (Dwg.16/55)

...Title Terms: **COLOUR** ;

International Patent Class (Main): **H04N-001/387** ...

... **H04N-001/40** ...

... **H04N-001/46** ...

... **H04N-001/58**

International Patent Class (Additional): **B41J-002/44** ...

... **B41J-002/485** ...

... **B41J-002/52** ...

... **B41J-002/525** ...

... **B41J-029/38** ...

... **H04N-001/04** ...

... **H04N-001/38** ...

... **H04N-001/393**

24/3,K/10 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007985317 \*\*Image available\*\*  
WPI Acc No: 1989-250429/198935  
XRPX Acc No: N89-190884

**Technique and equipment for assembling images - works with compressed data to increase speed of response and performs touching-up of image without de-compression**

Patent Assignee: CROSFIELD ELECTRONICS LTD (CROE )  
Inventor: ROSEN M B; STANSFIELD P W; ROSEN M  
Number of Countries: 003 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 330333	A	19890830	EP 89301184	A	19890208	198935 B
US 5140314	A	19920818	US 89310576	A	19890215	199236
EP 330333	B1	19930804	EP 89301184	A	19890208	199331
DE 68907945	E	19930909	DE 607945	A	19890208	199337
			EP 89301184	A	19890208	

Priority Applications (No Type Date): GB 884023 A 19880222

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 330333	A	E	3		
Designated States (Regional): DE GB					
US 5140314	A		7	G09G-001/06	
EP 330333	B1	E	9	G06F-015/62	
Designated States (Regional): DE GB					
DE 68907945	E			G06F-015/62	Based on patent EP 330333

**Technique and equipment for assembling images - ...**

**...works with compressed data to increase speed of response and performs touching-up of image without de-compression**

...Abstract (Basic): A technique for assembling images together involves each image being defined by several sets of data values, each set corresponding to a group of pixels of the image. The groups are arranged in a regular array across the image so that the sets of data values can be obtained from sets of first data, each of which defines the colour content of an image pixel in the group. Equipment for applying the technique comprises a control system (9,10) an assembled image store (5) and a modified image store (4). The control system (9,10) is used for determining the position of a first image relative to a second image in a desired assembled image, it operates the convert the sets of data values of the overlapping groups of pixels defining a region of the assembled images which overlaps and which is to be retouched into the corresponding sets of first data...

...If consolidates the converted sets of first data into an assembled set of data, modifying the assembled set of data as desired and storing the modified assembled data set in the modified image store (4). The control system also assembles the two images together and stores the assembled images in the assembled image store (5). Regions of the assembled image corresponding to previously modified regions are defined by the respective stored assembled data set in the

**modified image store (4...**

...ADVANTAGE - Technique enables compressed **images** to be combined without first completely decompressing **images** into spatual domain. Retouching and manipulation can also be performed with decompressed **image** '

...Abstract (Equivalent): A technique for assembling **images** together involves each **image** being defined by several sets of data values, each set corresponding to a group of **pixels** of the **image** . The groups are arranged in a regular array across the **image** so that the sets of data values can be obtained from sets of first data, each of which defines the **colour** content of an **image pixel** in the group. Equipment for applying the technique comprises a control system (9,10) an assembled **image** store (5) and a **modified image** store (4). The control system (9,10) is used for **determining** the position of a first **image** relative to a second **image** in a desired assembled **image** , it operates the **convert** the sets of data values of the **overlapping** groups of **pixels** defining a region of the assembled **images** which **overlaps** and which is to be retouched into the corresponding sets of first data...

...If consolidates the **converted** sets of first data into an assembled set of data, **modifying** the assembled set of data as desired and storing the **modified** assembled data set in the **modified image** store (4). The control system also assembles the two **images** together and stores the assembled **images** in the assembled **image** store (5). Regions of the assembled **image** corresponding to previously **modified** regions are defined by the respective stored assembled data set in the **modified image** store (4...

...ADVANTAGE - Technique enables compressed **images** to be combined without first completely decompressing **images** into spatual domain. Retouching and manipulation can also be performed with decompressed **image** '(s...

...Abstract (Equivalent): Each **image** is defined by respective sets of data values, each set corresp. to a group of **pixels** of the **image** , the groups being arranged in a regular array across the **image** whereby the sets of data values can be obtained from sets of first data each defining the **colour** content of an **image pixel** in the group. The apparatus comprises a control system for **determining** the position of a first **image** relative to a second **image** in a desired assembled **image** store; and a **modified image** store. The control system **converts** the sets of data values of the **overlapping** groups of **pixels** defining a region of the assembled **images** which **overlaps** and which is to be retouched into the corresponding sets of first data, consolidating the **converted** sets of first data into an assembled set of data, **modifying** the assembled set of data as desired, and storing the **modified** , assembled data set in the **modified image** store...

...The control system also assembles the two **images** together and stores the assembled **images** in the assembled **image** store, regions of the assembled **image** corresponding to previously **modified** regions being defined by the respective stored, assembled data set in the **modified image** store...

...USE - In high **resolution image** scanner, for assembling **images** together. (Dwg.1/3)

...Title Terms: **IMAGE** ;

International Patent Class (Main): **G06F-015/62** ...

International Patent Class (Additional): **G06F-015/66**

24/3,K/11 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004710298

WPI Acc No: 1986-213640/198633

Related WPI Acc No: 1987-279523; 1987-345419; 1988-024659

XRPX Acc No: N86-159517

**Thermal transfer image printer - uses binary dot pattern to control density of printing at each pixel of image**

Patent Assignee: TOSHIBA KK (TOKE )

Inventor: HIGUCHI K; HIRAHARA S; KANAI T; NAGATO H; OHNO T; YAMDA K

Number of Countries: 007 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 190901	A	19860813	EP 86300691	A	19860131	198633 B
JP 61176273	A	19860807	JP 8516768	A	19850131	198638
JP 62002775	A	19870108	JP 85142108	A	19850628	198707
JP 62069772	A	19870331	JP 85208823	A	19850924	198718
US 4724446	A	19880209	US 86821954	A	19860124	198809
EP 190901	B	19900926				199039
DE 3674426	G	19901031				199045

Priority Applications (No Type Date): JP 85208823 A 19850924; JP 8516768 A 19850131; JP 85142108 A 19850628; JP 8693843 A 19860423

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 190901	A	E	50		
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Designated States (Regional): DE FR GB IT NL

EP 190901	B				
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Designated States (Regional): DE FR GB IT NL

**Thermal transfer image printer...**

**...uses binary dot pattern to control density of printing at each pixel of image**

...Abstract (Basic): 22) to form a dot. The head moves relative to the paper, and defines a **pixel** using m x n dots (m,n integer). A multi-level dot generator (12) stores several binary dot patterns, and on receiving an **image** signal representing the density of each **pixel** produces an appropriate appropriate binary dot pattern...

...heats the elements in accordance with the required dot pattern. The stored dot patterns partially **overlap** each other, and a density level at which dot patterns are switched is **altered** w.r.t. direction of density level **change** .

...

...USE/ADVANTAGE - Capable of producing half- **tone** grey **images** , suitable for producing **colour** components of **colour** print **image** .

...Abstract (Equivalent): and printing paper moving in a direciton perpendicular to said one direction for defining one **pixel** of the **image** as a matrix of m x n dots (m, n: positive integers); and driving means...

...14) connected to said thermal head (16) for heating the heating elements upon receiving an **image** signal representing a density level of **pixel** , characterised in that said driving means (12, 14) heats a

predetermined heating member or members among the m x n heating members defining one **pixel** with a predetermined heating power or powers in accordance with the density levels of the **pixel** , thereby printing the **pixel** as a dot or dots having a size varying in accordance with the density level of the **pixel** . (34pp)

...Abstract (Equivalent): form one dot. The thermal head moves relative to the printing paper and defines a **pixel** using mxn printing dots (m,n: positive integers). A multi-level dot pattern generator stores...

...patterns having predetermined dots of the mxn dot matrix and selects, upon reception of an **image** signal indicating the density of each **pixel** , a binary dot pattern in accordance with the density of each **pixel** . Multi-level data is **determined** for each dot constituting the selected pattern in accordance with the density of each **pixel** .

...

...The multilevel dot pattern in which the data for each dot is **determined** is then generated. A drive device is connected between the multilevel dot pattern generator and...

...a dot pattern formed by dots having a size corresponding to the density of each **pixel** .

...

...ADVANTAGE - Increased number of density levels without increasing number of dots in dot matrix constituting **pixel** , dynamic range of gradation is wide and linearity is high. (31pp)p

...Title Terms: **IMAGE** ;

International Patent Class (Additional): **B41J-003/20** ...

... **H04N-001/40**

**24/3,K/12** (Item 12 from file: 350)  
 DIALOG(R)File 350:Derwent WPIX  
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003850099

WPI Acc No: 1983-846350/198351

XRPX Acc No: N83-225680

**Appts. combining video signals with text and graphics signals - has video switch and computer subsystem synchronised to track jitter in video signals**

Patent Assignee: NIPPON DIGITAL EQUIP KK (DIGI )

Inventor: STELL D E

Number of Countries: 016 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 96628	A	19831221				198351 B
AU 8315016	A	19831208				198405
FI 8301962	A	19840131				198411
BR 8303008	A	19840131				198412
JP 59057279	A	19840402	JP 8398747	A	19830602	198419
US 4498098	A	19850205	US 82384439	A	19820602	198508
CA 1185377	A	19850409				198519
EP 96628	B	19901114				199046
DE 3381990	G	19901220				199101

Priority Applications (No Type Date): US 82384439 A 19820602

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 96628           A E 37

Designated States (Regional): BE CH DE FR GB IT LI LU NL SE

EP 96628           B

Designated States (Regional): BE CH DE FR GB IT LI LU NL SE

**Appts. combining video signals with text and graphics signals...**

- ...Abstract (Basic): appts. is provided for combining video signals containing synchronisation signals with computer generated text and **graphics** signals for display together, in **overlay** , on a raster scan video display. A circuit **converts** the format of at least one of the signals to the non-phase modulated format...
- ...A video switch selectively supplies to the display, for each **pixel** , either the video signal or the computer-generated signals. The slave synch. signals are supplied...
- ...output subsystem as a clock for controlling the rate and time at which it supplies **pixel** information to the video switch, and to the video switch to control the time at...
- ...generated signals. The appts. may be used for educational purposes e.g. for computer which **evaluates** student responses and causes the video disc player to choose its display sequence.
- ...Abstract (Equivalent): Apparatus for combining video signals from a video source (20) with computer-generated text and **graphics** signals provided from a computer video output subsystem (50), for display together, in **overlay** , on a raster scan video display device (40), comprising: A. the video signals containing synchronization signals; B. means (80) for **converting** the format of at least one of said video signals and computer-generated text and **graphics** signals to the non-phase modulated format of the other if both are not already...
- ...the non-phase modulated versions of the video signals and the computer-generated text and **graphics** signals, on the other hand, for selectively supplying to the display device (40) for each **pixel** , either the video signals or the computer-generated signals; and E. the slave synchronization signals...
- ...as a clock (187) for controlling the rate and the time at which it supplies **pixel** information to the video switch (90), and to the video switch (90) to control the...
- ...Abstract (Equivalent): The computer-generated video is provided in RGB format, the other video is **converted** to RGB format if not already in that form and the two sets of RGB...
- ...multiplexer) selects which one of the two RGB signal sets to display, separately for each **pixel** . The **colour** of the computer-generated signals controls the switch's selection of source. A master-slave...
- ...locks the video switch, display and computer video generator to the timing of the video **image** source...
- ...base correctors. Displays up to 4 times text in given area of screen with high **resolution** . (18pp)n
- ...Title Terms: **GRAPHIC** ;
- International Patent Class (Additional): G06F-001/04 ...
- ... G06F-003/14 ...

... H04N-005/02 ...

... H04N-009/49



28/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010230214 \*\*Image available\*\*  
WPI Acc No: 1995-131471/199517  
Related WPI Acc No: 1994-191739; 1995-006991; 1995-344187  
XRPX Acc No: N95-103278

Image projection method with compact liquid crystal projector - using  
logic arrangement to display shifted portions of larger image via  
optical system with two faceted mirrors

Patent Assignee: PROXIMA CORP (PROX )  
Inventor: HAUCK L T; KAPPEL D; MINICH A P; NGUYEN H; SHAW R W; KAPPEL D W;  
NGUYEN H H

Number of Countries: 058 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9508132	A1	19950323	WO 94US10622	A	19940916	199517 B
AU 9477994	A	19950403	AU 9477994	A	19940916	199529
US 5459484	A	19951017	US 94237013	A	19940429	199547
US 5483382	A	19960109	US 9359550	A	19930511	199608
			US 93123133	A	19930917	
US 5510861	A	19960423	US 9359550	A	19930511	199622
			US 93122697	A	19930917	
			US 93123133	A	19930917	
			US 94260709	A	19940616	
			US 94306366	A	19940915	
EP 719421	A1	19960703	EP 94928631	A	19940916	199631
			WO 94US10622	A	19940916	
US 5555002	A	19960910	US 94235292	A	19940429	199642
			US 95475065	A	19950607	
JP 9503313	W	19970331	WO 94US10622	A	19940916	199723
			JP 95509406	A	19940916	
US 5682181	A	19971028	US 94235292	A	19940429	199749
			US 94237013	A	19940429	
			US 94247720	A	19940523	
US 5721565	A	19980224	US 94235292	A	19940429	199815
			US 94237013	A	19940429	
			US 94247720	A	19940523	
			US 94286010	A	19940804	
			US 95486105	A	19950607	

Priority Applications (No Type Date): US 94306366 A 19940915; US 93123133 A 19930917; US 94235292 A 19940429; US 94237013 A 19940429; US 94247720 A 19940523; US 94286010 A 19940804; US 9359550 A 19930511; US 93122697 A 19930917; US 94260709 A 19940616; US 95475065 A 19950607; US 95486105 A 19950607

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9508132	A1	E	179	G02B-005/08	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN					
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE					
AU 9477994	A			G02B-005/08	Based on patent WO 9508132
US 5459484	A		13	G09G-001/06	
US 5483382	A		14	G02B-009/20	CIP of application US 9359550
					CIP of patent US 5321450
US 5510861	A		13	G03B-021/28	CIP of application US 9359550
					CIP of application US 93122697

			CIP of application US 93123133
			CIP of application US 94260709
			CIP of patent US 5321450
			CIP of patent US 5400095
EP 719421	A1 E	1 G02B-005/08	Based on patent WO 9508132
Designated States (Regional): DE FR GB			
US 5555002	A	11 G09G-005/34	Cont of application US 94235292
JP 9503313	W	179 G02F-001/1335	Based on patent WO 9508132
US 5682181	A	41 G09G-005/08	CIP of application US 94235292
			CIP of application US 94237013
			CIP of patent US 5459484
US 5721565	A	21 G09G-005/00	CIP of application US 94235292
			CIP of application US 94237013
			CIP of application US 94247720
			Cont of application US 94286010

Image projection method with compact liquid crystal projector...

...using logic arrangement to display shifted portions of larger image via optical system with two faceted mirrors

...Abstract (Basic): The method involves **positioning** an **image** forming liquid crystal display horizontally in a low profile housing, above an optical system also...

...A light source is **positioned** at the rear of the housing to illuminate the optical system with high intensity light...

...thereby ensuring that the light is uniformly dispersed over the light impinging surface of the **image** forming unit...

...ADVANTAGE - Enables 1280 x 1024 workstation **image** to be displayed on low **resolution** 1024 x 768 personal computer liquid crystal display monitor...

...Abstract (Equivalent): The method involves **positioning** an **image** forming liquid crystal display horizontally in a low profile housing, above an optical system also...

...A light source is **positioned** at the rear of the housing to illuminate the optical system with high intensity light...

...thereby ensuring that the light is uniformly dispersed over the light impinging surface of the **image** forming unit...

...ADVANTAGE - Enables 1280 x 1024 workstation **image** to be displayed on low **resolution** 1024 x 768 personal computer liquid crystal display monitor...

...along a user selected path corresponding to a selected portion of a projected primary video **image** displayed on a remote viewing surface for generating an accentuating **image** information indicative of an accentuating **image** to be displayed in place of the user selected portion of the primary video **image** ;

...

... **bit map** memory means for storing and retrieving primary video information indicative of said primary video **image** and for storing and retrieving the accentuating **image** information to facilitate displaying the accentuating **image** on said primary video **image**

Title Terms: **IMAGE** ;

30/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010286169 \*\*Image available\*\*  
WPI Acc No: 1995-187428/199525  
Related WPI Acc No: 1999-431991  
XRPX Acc No: N95-146796

Colour printing appts. for CAD, DTP, computer graphics etc - has input device for inputting colour page description and creation device for creating intermediate information for recording by analysing page description information

Patent Assignee: CANON KK (CANO )

Inventor: SHIMIZU H

Number of Countries: 008 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 654759	A2	19950524	EP 94118203	A	19941118	199525 B
JP 8139953	A	19960531	JP 94277830	A	19941111	199632
EP 654759	A3	19970924	EP 94118203	A	19941118	199749
JP 11188928	A	19990713	JP 93290928	A	19931119	199938
			JP 98261522	A	19931119	
EP 654759	B1	19991027	EP 94118203	A	19941118	199950
			EP 99107655	A	19941118	
DE 69421363	E	19991202	DE 621363	A	19941118	200003
			EP 94118203	A	19941118	
ES 2139700	T3	20000216	EP 94118203	A	19941118	200016
JP 3158101	B2	20010423	JP 93290928	A	19931119	200125
			JP 98261522	A	19931119	
US 6323958	B1	20011127	US 94343868	A	19941117	200175
			US 97878402	A	19970618	
			US 98176263	A	19981020	
US 6490055	B1	20021203	US 94343868	A	19941117	200301
			US 97878402	A	19970618	

Priority Applications (No Type Date): JP 94277830 A 19941111; JP 93290928 A 19931119; JP 98261522 A 19931119

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 654759	A2	E	36	G06K-015/02	
				Designated States (Regional):	DE ES FR GB IT NL
JP 8139953	A		23	H04N-001/60	
EP 654759	A3			G06K-015/02	
JP 11188928	A		17	B41J-005/30	Div ex application JP 93290928
EP 654759	B1	E		G06K-015/02	Related to application EP 99107655
					Related to patent EP 933723
				Designated States (Regional):	DE ES FR GB IT NL
DE 69421363	E			G06K-015/02	Based on patent EP 654759
ES 2139700	T3			G06K-015/02	Based on patent EP 654759
JP 3158101	B2		18	B41J-005/30	Div ex application JP 93290928
					Previous Publ. patent JP 11188928
US 6323958	B1			G06F-015/00	Cont of application US 94343868
					Div ex application US 97878402
US 6490055	B1			G06K-015/00	Cont of application US 94343868

...Abstract (Basic): is created for recording by analysing the input description. An execution unit executes fast hardware rendering for the intermediate information. The rendering may be switched from hardware to software for a high grade colour logical drawing which...

...The fast hardware **rendering** of a colour **object** is implemented via a YMCK page buffer. The high grade logical drawing is implemented by **rendering** a colour **object** upon a **RGB** colour page buffer. The modes are automatically switched according to the data type...

...ADVANTAGE - Provides **rendering** of colour logical drawing at lower cost without loss of precision. Reduces amount of memory...

...by performing colour image expansion at high rate through banding process, without full multi-value **bit map** memory...

?

39/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2004 JPO & JAPIO. All rts. reserv.

06428052 \*\*Image available\*\*

**IMAGE PROCESSING METHOD, DEVICE AND RECORDING MEDIUM**

PUB. NO.: 2000-013616 [JP 2000013616 A]  
PUBLISHED: January 14, 2000 (20000114)  
INVENTOR(s): YANO KENTARO  
MAKITA TAKESHI  
YAMADA OSAMU  
MATSUURA TAKAHIRO  
SUWA TETSUYA  
YAMAZOE MANABU  
APPLICANT(s): CANON INC  
APPL. NO.: 10-177129 [JP 98177129]  
FILED: June 24, 1998 (19980624)

**IMAGE PROCESSING METHOD, DEVICE AND RECORDING MEDIUM**

INTL CLASS: H04N-001/48 ; G06T-003/40 ; G06T-005/00 ; H04N-001/387 ;  
H04N-001/60 ; G06T-007/00

**ABSTRACT**

PROBLEM TO BE SOLVED: To obtain a high quality output **image** with a little **processing** load by producing a histogram based on **pixel** data of an original **image**, **detecting pixel** data corresponding to a prescribed number of degrees obtd. by accumulating prescribed **pixel** values and performing **image processing** correction based on the **detected pixel** data.

SOLUTION: A histogram is produced based on the **pixel** data of an original **image**, **pixel** data corresponding to a prescribed number of degrees is **detected** by accumulating prescribed **pixel** values and **image processing** correction is performed based on the **detected pixel** data. In this system, a **printer** driver 103 performs **image** correction **processing** of **color** information of an **image** plotting instruction that is included in an inputted plotting instruction group by means of **image** correction **processing** 120. Correction processing 121 for a **printer** is performed by making a plotting instruction into a raster with the **color** information that is subjected to **image** correction **processing** and produces a raster **image** on an **RGB** bit page memory. And, **CMYK** data depending on a **printer** characteristic is produced by performing masking processing, etc., of each **pixel** and is transferred to a **printer** 105.

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39/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06069407 \*\*Image available\*\*

**METHOD FOR CORRECTING COLOR CORRELATION OF ERROR DIFFUSION HALFTONE**

PUB. NO.: 11-010918 [JP 11010918 A]  
PUBLISHED: January 19, 1999 (19990119)  
INVENTOR(s): GONDEK JAY S  
APPLICANT(s): HEWLETT PACKARD CO <HP>

APPL. NO.: 10-192442 [JP 98192442]  
FILED: June 23, 1998 (19980623)  
PRIORITY: 880475 [US 880475], US (United States of America), June 23,  
1997 (19970623)

METHOD FOR CORRECTING COLOR CORRELATION OF ERROR DIFFUSION HALFTONE

INTL CLASS: B41J-002/21 ; B41J-002/525 ; B41J-002/205 ; H04N-001/60 ;  
H04N-001/405 ; H04N-001/46

ABSTRACT

... execute only a correlation correction between magenta dots and cyan dots, by carrying out an **error diffusion** halftone process while taking many **color** planes into consideration when an arrangement of dots at any of **color** planes is to be **determined**.

SOLUTION: An **RGB color image** of a **printer** is converted to a **CMYK color** space with the use of a look-up table or the other general conversion means (S34). A **CMYK image** is turned to halftone so as to convert 8-bit four planes (**CMYK**) per one **color** of the **image** to four-plane binary **colors** (on or off dots) with a DPI resolution of the **printer** (S36). In other words, the **image** is converted and **printed** in a pattern of C, M, Y or K on or off dots (0 or 255 luminance) to **print** a **color** and a luminance (0-255) of a position of each **pixel**. The halftone **image** is stored in a memory.

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39/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05890846 \*\*Image available\*\*  
**IMAGE PROCESSOR AND ITS METHOD**

PUB. NO.: 10-173946 [JP 10173946 A]  
PUBLISHED: June 26, 1998 (19980626)  
INVENTOR(s): YABE TAKASHI  
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 08-333638 [JP 96333638]  
FILED: December 13, 1996 (19961213)

**IMAGE PROCESSOR AND ITS METHOD**

INTL CLASS: H04N-001/60 ; B41J-002/525 ; B41J-005/30 ; G06T-001/00 ;  
H04N-001/46

ABSTRACT

... compensate the reproducibility of a dark part corresponding to a user's purpose by setting **color** space compressing process parameters for a dark part of input **image** data according to an indicated **color** space compression quantity and performing a **color** space compressing process...  
...SOLUTION: A scanner part 10 scans an original to generate **color image** data consisting of R, a G, and a B component, and an input masking part 20 performs an input masking processing to perform conversion to **color image** data in a specific **RGB color** space. Then a **color** space compression part 30 performs a **color** space compressing **processing** for the **color image** data after the input masking processing on a matrix

basis and a LOG conversion part 40 performs conversion into **color image** data of a Y, an M, and a C component. Further, an output masking processing part 50 and a **filter** 60 perform an output masking processing and a **filter** processing and the result is outputted to a **printer** 70. Here, a decision part 71 performs edge **detection** and saturation decision making for the **color image** data after the input masking to decide whether or not **pixels** represented with the **image** data are a **character** part or **image** part.

39/3,K/4 (Item 4 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05700064 \*\*Image available\*\*  
METHOD FOR RENDERING ORIGINAL **IMAGE** UNDER RESTRICTION OF INK DUTY CYCLE  
AND APPARATUS THEREFOR

PUB. NO.: 09-314864 [JP 9314864 A]  
PUBLISHED: December 09, 1997 (19971209)  
INVENTOR(s): JIYOSEFU SHIYUU  
CHIYASHIN RII  
APPLICANT(s): SEIKO EPSON CORP [000236] (A Japanese Company or Corporation)  
, JP (Japan)  
APPL. NO.: 09-020423 [JP 9720423]  
FILED: February 03, 1997 (19970203)  
PRIORITY: 7-11,437 [US 11437-1996], US (United States of America),  
February 09, 1996 (19960209)  
7-641,684 [US 641684-1996], US (United States of America),  
May 02, 1996 (19960502)

METHOD FOR RENDERING ORIGINAL **IMAGE** UNDER RESTRICTION OF INK DUTY CYCLE  
AND APPARATUS THEREFOR

INTL CLASS: B41J-002/175 ; H04N-001/60 ; H04N-001/46  
...JAPIO KEYWORD:Ink Jet Printers )

#### ABSTRACT

... ink duty cycle only by the min. calculation by executing a process forming an electrical **printing** command signal containing a **process** obtaining an output **image** by **determining** a specific output **pixel** and a process applying this **printing** command signal to operate a **printing** mechanism...

...SOLUTION: After processing 61 for compensating an ink **color**, a **color** expressed by uncorrected **RGB** is corrected by a process of a block 62 in order to obtain the output **color** fitted to the restriction value of a single ink duty cycle. The restriction value of...

... total ink duty cycle shown in a block 64 is imposed on the obtained corrected **RGB** value by a predetermined method and a **printer** is operated according to the **image** obtained as the result but the actual command of the **printer** is generated by the further **image processing** in a block 66. The conversion to a CMY region or half toning forming the level fitted to the typical binary operation of the **printer** can be contained in this **image processing**.

39/3,K/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO

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05599984      \*\*Image available\*\*

**IMAGE      PROCESSING      UNIT AND      IMAGE      PROCESSING      METHOD**

PUB. NO.:      09-214784      [JP 9214784      A]  
PUBLISHED:      August 15, 1997 (19970815)  
INVENTOR(s):      MIYAKE YOICHI  
                    TERADA KAZUTO  
                    MIYATA KIMIYOSHI  
                    TAMURA MASAJI  
                    SAITO MASAYUKI  
APPLICANT(s):      MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or  
   Corporation), JP (Japan)  
APPL. NO.:      08-014160      [JP 9614160]  
FILED:      January 30, 1996 (19960130)

**IMAGE      PROCESSING      UNIT AND      IMAGE      PROCESSING      METHOD**

INTL CLASS:      H04N-001/60 ;      B41J-005/30 ;      G06T-001/00 ;      H04N-001/23 ;  
                    H04N-001/46

...JAPIO KEYWORD: Ink Jet      Printers )

**ABSTRACT**

PROBLEM TO BE SOLVED: To obtain **color** reproduction with high fidelity and a pseudo medium tone **image** excellent in visuality by **detecting** a **color** of a display noted **picture element** of an output device based on a **vector** of the noted **picture element** and a **vector** of **picture elements** in the vicinity of the noted **picture element**.

...

...SOLUTION: A **color** sample measurement circuit C2 measuring an object output device measures 8 **colors** to be recorded, a **color** sample measurement circuit C1 measuring a target output device samples an **RGB** space at an equal interval, measures outputted 125 **colors** and provides an output of **vector** data based on a prescribed absolute reference white **color**. Then a pseudo medium tone processing circuit C6 obtains a pseudo medium tone **image** by using a **color** space **vector** of a noted **picture element** and a **color** space **vector** of **picture elements** in the vicinity of the noted **picture element** mapped to a process **color** space so as to allocate one **color** recorded or displayed by the output device adaptively.

39/3,K/6      (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO

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05568438      \*\*Image available\*\*

**INK-JET RECORDING APPARATUS**

PUB. NO.:      09-183238      [JP 9183238      A]  
PUBLISHED:      July 15, 1997 (19970715)  
INVENTOR(s):      YOSHIDA YASUNARI  
APPLICANT(s):      BROTHER IND LTD [000526] (A Japanese Company or Corporation),  
   JP (Japan)  
APPL. NO.:      07-353178      [JP 95353178]  
FILED:      December 29, 1995 (19951229)

INTL CLASS:      B41J-002/21 ;      B41J-002/205 ;      B41J-002/485



...JAPIO KEYWORD: Ink Jet Printers )

ABSTRACT

PROBLEM TO BE SOLVED: To reproduce normal **color** by increasing density sufficiently, for example, even in a **picture element** which is formed by low density ink by forming a **picture element** of a specified **color** by multiple **printing** in which ink of a specified **color** is sprayed repeatedly...

...SOLUTION: First, it is judged whether a set **printing** mode is a **color printing** mode or not (S1), and when judged to be the **color printing** mode, **color printing** data to be **printed** are input (S2). When the **color printing** data are expressed by an **RGB image** signal, the **color** signal is converted from the **RGB image** signal into a CMY signal, and an ink quantity is **determined** on the basis of the CMY signal (S3). After that, the CMY signal is corrected on the basis of the ink quantity (S4), and the dot **image** data of each **color** are prepared by binary conversion **processing** using a **dither** method, an **error diffusion** method, etc.

39/3,K/7 (Item 7 from file: 347)

DIALOG(R)File 347:JAPIO

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05403907 \*\*Image available\*\*

**IMAGE PROCESSING METHOD AND DEVICE, COPYING MACHINE, SCANNER AND PRINTER MOUNTING THE DEVICE**

PUB. NO.: 09-018707 [JP 9018707 A]

PUBLISHED: January 17, 1997 (19970117)

INVENTOR(s): SONODA SHINYA

AKAGI MASAHIRO

OMAE KOICHI

YANAGIDA MASAHIRO

CHIGA MASATAKA

APPLICANT(s): OMRON CORP [000294] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 07-185002 [JP 95185002]

FILED: June 29, 1995 (19950629)

**IMAGE PROCESSING METHOD AND DEVICE, COPYING MACHINE, SCANNER AND PRINTER MOUNTING THE DEVICE**

INTL CLASS: H04N-001/40 ; G03G-015/01; G03G-021/04

ABSTRACT

PURPOSE: To extract a specific pattern consisting of plural marks by **detecting** the mark in a prescribed **color** and shape on an original...

...CONSTITUTION: An **RGB color** signal in each **color** is fed to a threshold processing section 13 via an **image** input section 12. When a **color** of a mark is yellow, since a B signal of a **picture element** of the mark is extremely smaller than that of other areas, the B signal is...

... to a shape extract section 13a, in which threshold level processing is conducted and the **RGB** signal is fed to a **color** extract section 13b, where an yellow **color** is **detected**, outputs of the sections 13a, 13b are fed to an AND 13c, where they are ANDed and a binary **image** from which yellow **picture element** only is eliminated is generated. The binary **image** is given to a mark position **detection** section 15 via a 1st storage device 14, in which the **image** matches the shape of the mark, mark

position information is extracted and fed to an...

... result is provided as an output. The thresholding is simply conducted based on a single **color**.

39/3,K/8 (Item 8 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05184442 \*\*Image available\*\*  
**COLOR IMAGE PROCESSOR**

PUB. NO.: 08-139942. [JP 8139942 A]  
PUBLISHED: May 31, 1996 (19960531)  
INVENTOR(s): NISHIMURA KAZUYUKI  
SATO SHINICHI  
APPLICANT(s): MATSUSHITA GRAPHIC COMMUN SYST INC [330729] (A Japanese  
Company or Corporation), JP (Japan)  
APPL. NO.: 06-273577 [JP 94273577]  
FILED: November 08, 1994 (19941108)

**COLOR IMAGE PROCESSOR**

INTL CLASS: H04N-001/46  
...JAPIO KEYWORD:Ink Jet Printers )

#### ABSTRACT

PURPOSE: To reduce a circuit scale and to smooth gradation by binarizing **RGB** multi level data, inputting the binarized data to a **color** conversion means, outputting achromatic data as to a **pixel** decided to be an achromatic **color** based on binarized data and outputting the binarized data for a chromatic **color pixel**.

...

...CONSTITUTION: A selector 29 of an achromatic **color** deciding section 12 receiving an **RGB** multi level digital input signal 14 in parallel from a **color image** reader selects a threshold level 30 for deciding an achromatic **color**. On the other hand, a **MAX detection** circuit 21 and a **MIN detection** circuit 22 **detect** respectively a maximum value 23 and a minimum value 24, a difference device 25 obtains...

... 28. A comparator 31 compares the value 27 and a threshold level 30 for achromatic **color** decision. The comparison result is held by FFs 33, 34, and an AND circuit 35, ANDs the held signals to decide whether or not the **pixel** is an achromatic **color** and the result of decision is outputted to a conversion section 13 via an adjustment circuit 36. The conversion section 13 replaces binarized data of the **pixel** decided to be achromatic and outputs achromatic data and in the case of the **pixel** decided to be chromatic, binarized data are outputted as they are.

39/3,K/9 (Item 9 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05043941 \*\*Image available\*\*  
**IMAGE PROCESSOR AND METHOD FOR PROCESSOR**

PUB. NO.: 07-336541 [JP 7336541 A]  
PUBLISHED: December 22, 1995 (19951222)  
INVENTOR(s): SAITOU RIE  
ONO AKIO  
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 06-123747 [JP 94123747]  
FILED: June 06, 1994 (19940606)

**IMAGE PROCESSOR AND METHOD FOR PROCESSOR**

INTL CLASS: H04N-001/407 ; G06T-005/00

**ABSTRACT**

PURPOSE: To obtain excellent gradation by providing an identification pattern **detection** means, a gradation correction means, and a means revising correction information based on the **detection** of an identification pattern by the identification pattern **detection** means to the processing unit...

...CONSTITUTION: A **color image** signal read by an **image** scanner section 201 is given to an identification pattern discrimination section 101 and **picture element** information discriminating superimposed identification pattern is fed to an LUT section 104, and an **RGB** signal is outputted to a **color** signal processing section 102. The processing section 102 converts the **RGB** signal into a YMCK signal and provides the signal to a pattern addition section 103 and the addition section 103 adds the identification pattern to an **image** signal to provide the output of the result to the LUT section 104. Optimum gamma...

... on a preset LUT and a signal received from the discrimination section 101 and the **image** signal is outputted to a PWM section 105. The **image** signal subjected to pulse width modulation in the PWM section 105 is outputted to a **printer** section 202, in which a visual **image** is formed and **printed** out on recording paper.

39/3,K/10 (Item 10 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05034539 \*\*Image available\*\*  
**COLOR IMAGE PROCESSOR**

PUB. NO.: 07-327139 [JP 7327139 A]  
PUBLISHED: December 12, 1995 (19951212)  
INVENTOR(s): ISHIKAWA TAKASHI  
WADA KATSUHIRO  
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 06-118619 [JP 94118619]  
FILED: May 31, 1994 (19940531)

**COLOR IMAGE PROCESSOR**

INTL CLASS: H04N-001/60 ; B41J-002/525 ; G06F-003/12 ; H04N-001/46

**ABSTRACT**

PURPOSE: To improve **print** quality of an achromatic part and to suppress consumption of a recording agent by **detecting** an achromatic **pixel** and a

pixel from a received color image signal recognized to be a background part of a formed image and controlling the processor so as to form an image of the achromatic part with a black recording agent...

...CONSTITUTION: An achromatic color detection circuit 104 output an achromatic color detection signal 104a whose level is 1 when each pixel of RGB image data inputted from an input terminal 201 is an achromatic color picture element. On the other hand, a lightness difference detection circuit 101 generates lightness from RGB image data received from the input terminal 201 to obtain a difference from the lightness of an adjacent pixel. When the lightness difference is a threshold level or over, lightness difference detection signals 101a, 101b are outputted. An AND circuit 202 output 2 in the case of the lightness difference over the threshold level and of an achromatic color. Moreover, an OR circuit 203b output both of the inputs to an RSFF 204. As ...

... of the circuit 203b acts like a RESET signal with respect to a black monochromatic color signal.

39/3,K/11 (Item 11 from file: 347)  
DIALOG(R)File 347:JAPIO  
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00802273 \*\*Image available\*\*  
PICTURE READING EQUIPMENT

PUB. NO.: 56-122573 [JP 56122573 A]  
PUBLISHED: September 26, 1981 (19810926)  
INVENTOR(s): AYADA NAOKI  
YUKIMURA NOBORU  
SAITO SEIJI  
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 55-027068 [JP 8027068]  
FILED: March 03, 1980 (19800303)  
JOURNAL: Section: E, Section No. 87, Vol. 05, No. 198, Pg. 161,  
December 16, 1981 (19811216)

INTL CLASS: H04N-001/028 ; B41J-003/04 ; G03G-015/04; G06K-009/20  
...JAPIO KEYWORD:Ink Jet Printers ); R107 (INFORMATION PROCESSING...

#### ABSTRACT

... an original picture and leading the picture information which has been scanned through the mosaic filter by the optical means, to the light detecting element array...

... guide plate 2 is fed to the original base glass 4 having a stripe (mosaic) filter STF by the first feed roller 3, and it is conveyed to the paper discharge...

... light source 10, and the picture information of the original is made to form an image on the light detecting element array 9 by the lens 8 through the mirror 7. On the glass are provided the STF41R, 41G, 41B... of red, green, blue for forming the color picture elements 41, 42..., and the light detection element array 9 is controlled so as to read by synchronizing with each color filter of STF41, 42.... In this way, a beam splitter, a relay lens, etc. become unnecessary...

39/3,K/12 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015784520 \*\*Image available\*\*  
WPI Acc No: 2003-846723/200379  
Related WPI Acc No: 1997-247778  
XRPX Acc No: N03-676742

Color image reproducing method in digital photo printer , involves  
obtaining preliminary read out image signal representing picture  
elements detected at coarser intervals than in original image signal

Patent Assignee: FUJI PHOTO FILM CO LTD (FUJF )

Inventor: MATAMA T

Number of Countries: 003 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1359742	A2	20031105	EP 96117418	A	19961030	200379 B
			EP 200316913	A	19961030	

Priority Applications (No Type Date): JP 95283144 A 19951031

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1359742	A2	E	26	H04N-001/407	Div ex application EP 96117418 Div ex patent EP 772342

Designated States (Regional): DE FR GB

Color image reproducing method in digital photo printer , involves  
obtaining preliminary read out image signal representing picture  
elements detected at coarser intervals than in original image signal

Abstract (Basic):

... A preliminary read out image signal representing picture  
elements detected at coarser intervals than in original image  
signal, is obtained. The dynamic range of preliminary read out image  
signal is calculated, and the dynamic range compression rate is set.  
The number of bits of image signal subjected to dynamic range  
compression process, is set larger than the bits of processed image  
signal.

... An INDEPENDENT CLAIM is also included for the image  
reproducing apparatus...

...For color image reproducing apparatus (claimed) such as digital  
photo printer .

...

...The color reproducibility in the printed image is enhanced, and  
printed image having good image quality is obtained, even from an  
original image having a strong target area contrast...

...The figure shows an explanatory view of the image reproducing  
apparatus...

... image read out section (1A...

... image processing section (1B...

... RGB filter (4

Title Terms: COLOUR ;

International Patent Class (Main): H04N-001/407

39/3,K/13 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012902686 \*\*Image available\*\*  
WPI Acc No: 2000-074522/200007  
XRPX Acc No: N00-058448

**Background noise removal in low-cost digital colour copying apparatus**  
Patent Assignee: XEROX CORP (XERO )  
Inventor: BALL J L  
Number of Countries: 031 Number of Patents: 007  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 963106	A2	19991208	EP 99110509	A	19990531	200007 B
CN 1237721	A	19991208	CN 99107156	A	19990531	200016
JP 2000050083	A	20000218	JP 99153413	A	19990601	200020
BR 9901692	A	20000815	BR 991692	A	19990531	200045
MX 9905027	A1	20000901	MX 995027	A	19990531	200139
TW 432863	A	20010501	TW 99108730	A	19990527	200168
US 6323957	B1	20011127	US 9888099	A	19980601	200175

Priority Applications (No Type Date): US 9888099 A 19980601

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 963106	A2	E	23	H04N-001/58	
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT					
LI LT LU LV MC MK NL PT RO SE SI					
CN 1237721	A			G03G-015/00	
JP 2000050083	A		68	H04N-001/409	
BR 9901692	A			G03G-021/00	
MX 9905027	A1			G06K-015/00	
TW 432863	A			H04N-001/40	
US 6323957	B1			H04N-001/409	

**Background noise removal in low-cost digital colour copying apparatus**

Abstract (Basic):

... The inventive system processes scanned **pixel** **colours** when processing signals within electronic copying apparatus. A statistical module (20) collects data on a **pixel** stream, derived by scanning an original document. A MIC module (22) extracts background characteristics for **determining** a reference background **colour** value for the scanned document. The background **colour** value and values of **pixels** within the stream are compared by RTE module (24), outputting control signals for adjusting, when necessary, **pixel** values to remove undesirable background noise, i.e. spaced-out dot-patterning, from the output reproduced document. Background **pixels** are made pure white by processing their luminance to become maximum.. **Pixels** far from background **colour** values are left unchanged, while intermediate **pixels** are linearly adjusted as required.

... i.e. dot-patterning, in connection with 'marking engines' used in digital black/white and **colour** copying/ **printing** apparatus, also in other applications where noise removal is beneficial...

...Elimination of undesirable background noise in real-time, whereby **pixels** are adjusted during one single pass of an original document, and copying apparatus throughput is not reduced, also enabling saturated background **colours** to be reproduced as white, i.e. when original **images** are **printed** on **coloured** paper...

...The drawing shows in block diagram form an **image** path through digital

copying apparatus (A') under the inventive system...

... **Image** path electronic **processing** (12...

... **Colour** space converter from **Red - Green - Blue** system to an alternative such as YCC (16...

...Rendering module for converting **colours** (18...

...RTE module for transforming **pixel** values to remove background noise (24

...Title Terms: **COLOUR** ;

...International Patent Class (Main): **H04N-001/40** ...

... **H04N-001/409** ...

... **H04N-001/58**

...International Patent Class (Additional): **G06T-005/00** ...

... **G06T-005/40** ...

... **H04N-001/46** ...

... **H04N-001/60**

**39/3,K/14** (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012445279 \*\*Image available\*\*

WPI Acc.No: 1999-251387/199921

XRFX Acc No: N99-187997

**Image processor for color facsimile, copier - judges image to be monochrome without half tone image , when mean value of gradation level of each chrominance signal data is less than lower threshold value and greater than larger threshold value**

Patent Assignee: MURATA KIKAI KK (MURK )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11075073	A	19990316	JP 97235721	A	19970901	199921 B

Priority Applications (No Type Date): JP 97235721 A 19970901

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 11075073 A 8 H04N-001/60

**Image processor for color facsimile, copier...**

...**judges image to be monochrome without half tone image , when mean value of gradation level of each chrominance signal data is less than lower...**

...Abstract (Basic): NOVELTY - The gradation level difference of each chrominance signal data from **pixels** of **image** is **detected** to be less than predetermined value. When the mean value of gradation level is less than lower threshold value and higher than larger threshold value, then the **image** is judged to be **monochrome** which does not include half-tone **image** . DETAILED DESCRIPTION - A reader (10) obtains chrominance signal data ( **RGB** ) from each **pixel** of an **image** . INDEPENDENT CLAIMS are included for the following: **image processing**

method; **image processing** program...

...USE - For **color facsimile, copier, printer** .

...

...ADVANTAGE - The **monochrome image** and **color image** are distinguished correctly, even when the **monochrome image** with half tone portion and **monochrome image** without half tone portion are distinguished correctly. The amount of data processing is reduced compared with usual **color image processor** . The communication time at time of facsimile transmission is reduced, thereby communication cost is economical. The process efficiency is raised by simplifying extract of **monochrome image** . DESCRIPTION OF DRAWING(S) - The figure shows block diagram of the **image processor** . (10) Reader

Title Terms: **IMAGE** ;

International Patent Class (Main): **H04N-001/60**

International Patent Class (Additional): **G06T-007/00** ...

... **H04N-001/40** ...

... **H04N-001/41** ...

... **H04N-001/46**

**39/3,K/15** (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012261173 \*\*Image available\*\*

WPI Acc No: 1999-067279/199906

XRFX Acc No: N99-050537

**Image processor for colour printer - has processor that converts RGB image data to MCYK image data and finally outputs converted MCYK data and stored attribute data**

Patent Assignee: CANON KK (CANO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10313413	A	19981124	JP 97121293	A	19970512	199906 B

Priority Applications (No Type Date): JP 97121293 A 19970512

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10313413	A	12	H04N-001/60	

**Image processor for colour printer - ...**

...has processor that converts RGB image data to MCYK image data and finally outputs converted MCYK data and stored attribute data

...Abstract (Basic): The processor includes a discrimination unit that distinguishes the **colour** space of the input **image** data. The **image** data and **attribute** data from every **pixel** is stored in a memory based on distinguished **colour** space...

...A **processor** converts the **RGB image** data to **MCYK image** data. An output unit outputs the **MCYK image** data and stored **attribute** data

...

...ADVANTAGE - Simplifies **evaluation of printer** .



Title Terms: **IMAGE** ;  
International Patent Class (Main): **H04N-001/60**  
International Patent Class (Additional): **B41J-002/525 ...**

... **B41J-005/30 ...**

... **G06F-003/12 ...**

... **G06T-001/00 ...**

... **H04N-001/46**

**39/3,K/16** (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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012231319 \*\*Image available\*\*  
WPI Acc No: 1999-037426/199904  
XRPX Acc No: N99-028266

Printer image half-toning apparatus - has page building module to perform raster operations on received image data and uses half-toning module to selectively subject rasters to several half-tone procedures  
Patent Assignee: HEWLETT-PACKARD CO (HEWP )  
Inventor: CLOUTHIER S C; HEINS D; HOFFMANN B E; NOTTINGHAM J R; VONDRAN G L  
Number of Countries: 026 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 886435	A2	19981223	EP 98105566	A	19980326	199904 B
JP 11015966	A	19990122	JP 98163653	A	19980611	199914
US 5949964	A	19990907	US 97877343	A	19970617	199943

Priority Applications (No Type Date): US 97877343 A 19970617

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 886435	A2	E	10	H04N-001/40	
Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI					
LT LU LV MC MK NL PT RO SE SI					
JP 11015966	A		9	G06T-005/00	
US 5949964	A			G06F-015/00	
Printer image half-toning apparatus...					

...has page building module to perform raster operations on received image data and uses half-toning module to selectively subject rasters to several half-tone procedures

...Abstract (Basic): The host processor (10) configures the colour image to 3 colour planes of pixel values each evidencing pixels of different common colours ( red , green , blue ) and each plane is converted into a printer control language format and is transmitted to a printer (12) containing a central processor, a RAM and a ROM for storage of various procedures enabling operation of the printer . An image type identification module (14) determines and classifies each type of image structure from the processor and the image data are passed to a page building module (16), performing a raster operation on the received image data to arrive at a 'page intermediate' format...

...compressed in a compression module (18) and stored in a store block (20) until the printer is ready, when the data pass through a decompress module (22), a colour correction module (24) and a half-tone module

(26) to a **printer** engine (28). The half-tone tables used can be adjusted to improve the half-toning...

...USE - Implementation of multiple half-tone procedures on **image** .

Title Terms: **PRINT** ;

International Patent Class (Main): **G06F-015/00** ...

... **G06T-005/00** ...

... **H04N-001/40**

...International Patent Class (Additional): **H04N-001/405**

**39/3,K/17** (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011891660 \*\*Image available\*\*

WPI Acc No: 1998-308570/199827

XRPX Acc No: N98-242737

Image processing method in printer , copier, facsimile - involves correcting colour offset when linear pattern extracted from pixel matrix matches standard pattern, and if object pixel in matrix is black colour

Patent Assignee: RICOH KK (RICO )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10112806	A	19980428	JP 96266406	A	19961007	199827 B

Priority Applications (No Type Date): JP 96266406 A 19961007

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10112806	A	12	H04N-001/46	

Image processing method in printer , copier, facsimile...

...involves correcting colour offset when linear pattern extracted from pixel matrix matches standard pattern, and if object pixel in matrix is black colour

...Abstract (Basic): The method involves calculating a predetermined conditional expression for each **pixel** of a **colour image** . From the **colour image** , primary **colours** ' RGB ' are identified, when the conditional expression is satisfied in a **colour detector** (20). When the **colour** of the **image** is not primary **colours** , brightness value of the **image** is calculated. A **monochrome** judging unit (30) **determines** white and black **colours** by comparing the **detected** brightness value with a threshold value...

...Then, a **pixel** matrix is assembled with the identified object **pixel** as centre. A linear pattern is then extracted from the matrix and it is compared with a standard pattern set up beforehand. If both the patterns are same and **colour** of the object **pixel** is black, a **colour** offset correction unit (40) performs **colour** offset correction ...

...ADVANTAGE - Corrects **colour** offset generated to both sides of black line, correctly...

Title Terms: **IMAGE** ;

International Patent Class (Main): H04N-001/46  
International Patent Class (Additional): G06T-001/00 ...

... H04N-001/60

39/3,K/18 (Item 7 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010894176 \*\*Image available\*\*  
WPI Acc No: 1996-391127/199639  
Related WPI Acc No: 1996-391126  
XRPX Acc No: N96-329681

Image processor for printer , compatible with NTSC colour copier,  
HDTV station, CAD data - has black edge processing circuit to detect  
area outside of image to copy that image accordingly

Patent Assignee: MITA IND CO LTD (MTAI )  
Inventor: FUJIMOTO M; HAYASHI S; MIYAZAKI T  
Number of Countries: 002 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8191391	A	19960723	JP 952471	A	19950111	199639 B
US 5771107	A	19980623	US 95580930	A	19951229	199832

Priority Applications (No Type Date): JP 952471 A 19950111; JP 952470 A  
19950111

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8191391	A		12	H04N-001/409	
US 5771107	A			H04N-001/38	

Image processor for printer , compatible with NTSC colour copier,  
HDTV station, CAD data...

...has black edge processing circuit to detect area outside of image to  
copy that image accordingly

...Abstract (Basic): The image processor has a scanner (2) which reads  
RGB components of a document (1). A complementary colour inversion  
processing circuit (3) converts the read-out data into complementary  
colour data composed of CMY components, using this colour data,  
judgment is made to process the image with a predetermined pixel  
unit...

...The colour data is sent to a black edge processing circuit (4) and to  
a black edge detector circuit (10) which detects outer side of  
black edge in the image . Accordingly the image is observed and  
given out as copy output (9) through a black generating circuit (5), a  
gradation correction circuit (6), a half tone processing circuit (7)  
and a printer (8...

...ADVANTAGE - Improves resolution characteristics in image . Enhances  
expressing power. Reduces noise...

Title Terms: IMAGE ;

International Patent Class (Main): H04N-001/38 ...

... H04N-001/409

...International Patent Class (Additional): G06T-005/20 ...

... H04N-001/387 ...

... H04N-001/40 ...

... H04N-001/46 ...

... H04N-001/60

39/3,K/19 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010153825 \*\*Image available\*\*

WPI Acc No: 1995-055077/199508

XRPX Acc No: N95-043267

Processing colour image data for colour printer and image  
display - selecting colour for display when number of terms in array is  
equal to predetermined number

Patent Assignee: MITSUBISHI KASEI CORP (MITU )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 6333003	A	19941202	JP 93142509	A	19930524	199508 B

Priority Applications (No Type Date): JP 93142509 A 19930524

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 6333003	A	6	G06F-015/62	

Processing colour image data for colour printer and image  
display...

...selecting colour for display when number of terms in array is equal to  
predetermined number

...Abstract (Basic): The input image data with colour exceeding a  
predetermined number is converted to image data with colour  
selected by a predetermined number. A histogram of the colour is  
created, based on the colour for each pixel of the input image  
data. The minimum frequency term is selected after sorting out the  
array of the histogram. The minimum frequency is added to the frequency  
of RGB value. The minimum frequency term processing erases the  
minimum frequency term and resorts the array based on the frequency  
after addition to RGB value...

...until the number of terms of the array is equal to a predetermined  
number. The colour is selected as a display colour when the number  
of terms of an array becomes equal to the predetermined number. Each  
RGB value term erased by the array is replaced and displayed as RGB  
value corresponding to approximation colour memorised. If the  
frequency which appears to an input image data gives priority and  
selects a high colour, the frequency of the colour with lower  
frequency is estimated...

...ADVANTAGE - Performs frequency evaluation effectively. Selects colour  
which reproduces natural colour tone...

...Title Terms: COLOUR ;

International Patent Class (Main): G06F-015/62

International Patent Class (Additional): H04N-001/40 ...

... H04N-001/46

39/3,K/20 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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009959203 \*\*Image available\*\*

WPI Acc No: 1994-226916/199428

XRPX Acc No: N94-178880

**Parallel error diffusion method for displaying colour images on raster colour display in computer or printer - reduces speed with which halftoning method must be performed by performing halftoning of output image in parallel by simultaneously error diffusing more than one line of input at same time**

Patent Assignee: CANON KK (CANO )

Inventor: NAYLOR W C; WEBB M J; WEBB M

Number of Countries: 010 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 606988	A2	19940720	EP 94300111	A	19940107	199428 B
AU 9453116	A	19940714	AU 9453116	A	19940110	199432
JP 7020839	A	19950124	JP 941385	A	19940111	199513
EP 606988	A3	19940817	EP 94300111	A	19940107	199530
US 5553165	A	19960903	US 94177306	A	19940104	199641
AU 674552	B	19970102	AU 9453116	A	19940110	199709
EP 606988	B1	20010829	EP 94300111	A	19940107	200150
DE 69428061	E	20011004	DE 628061	A	19940107	200166
			EP 94300111	A	19940107	
JP 3406934	B2	20030519	JP 941385	A	19940111	200334

Priority Applications (No Type Date): AU 936763 A 19930111

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 606988 A2 E 19 H04N-001/40

Designated States (Regional): DE ES FR GB IT NL SE

AU 9453116 A H04N-007/12

JP 7020839 A 16 G09G-005/02

EP 606988 A3 H04N-001/40

US 5553165 A 17 G06K-009/36

AU 674552 B H04N-007/12 Previous Publ. patent AU 9453116

EP 606988 B1 E H04N-001/40

Designated States (Regional): DE ES FR GB IT NL SE

DE 69428061 E H04N-001/40 Based on patent EP 606988

JP 3406934 B2 17 G09G-005/02 Previous Publ. patent JP 7020839

**Parallel error diffusion method for displaying colour images on raster colour display in computer or printer - ...**

**...reduces speed with which halftoning method must be performed by performing halftoning of output image in parallel by simultaneously error diffusing more than one line of input at same time**

**...Abstract (Basic): The method comprises the steps of dividing the input pixels (60) to be error diffused into two groups (2 x RGB ). Receives the first group of input pixels and combines (75) them with a first group previously calculated error diffusion data from neighbouring pixels to produce a first group of input corrected pixels .**

**...**

**...For each group of corrected pixels a first display output value is determined (53) with associated error diffusion value to obtain a**

first group of display output data (59) and **error diffusion** data (57). Simultaneously a second group of **pixels** is similarly combined (76) and obtained. The second group is stored (57) in a store...

...ADVANTAGE - Reduces speed with which **error diffusion** process must be carried out through provision of multiple **error diffusion** process simultaneously error diffusing different portions of **image** .

...Abstract (Equivalent): A method of reducing the rate at which an **image** formed by input **pixels** is error diffused, said **image** comprising at least one line of input **pixels** , said method comprising the steps of  
...

...a) dividing the input **pixels** to be error diffused into at least two groups, said groups comprising different portions of the same at least one line of said **image** ;  
(...

...b1) receiving the first group of input **pixels** and combining the first group of input **pixels** with a first group of previously calculated **error diffusion** data from neighbouring **pixels** to produce a first group of input corrected **pixels** ;  
(...

...b2) **determining** for each input corrected **pixel** of the first group a first display output value and associated **error diffusion** value to obtain a first group of display output data and a first group of **error diffusion** data...

...b3) storing the first group of **error diffusion** data in a first storage means...

...c) simultaneously with step (b), with a second one of the groups of input **pixels** , performing a second series of sub-steps comprising...

...c1) error diffusing a second group of previously calculated input corrected **pixels** to obtain a second group of **error diffusion** data and a second group of display output data...

...c2) receiving the second group of input **pixels** and combining the second group of input **pixels** with the second group of **error diffusion** data to obtain a second group of input corrected **pixels** ;  
and...

...c3) storing the second group of input corrected **pixels** in a storage means

...Title Terms: **COLOUR** ;

...International Patent Class (Main): **H04N-001/40** ...

... **H04N-007/12**

International Patent Class (Additional): **G06T-001/00** ...

... **G06T-005/00** ...

... **H04N-001/405** ...

... **H04N-001/46**

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File 348:EUROPEAN PATENTS 1978-2003/Dec W02

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File 349:PCT FULLTEXT 1979-2002/UB=20031225,UT=20031218

(c) 2003 WIPO/Univentio

? ds

Set	Items	Description
S1	8914	BITMAP?? OR BIT()MAP??
S2	924	VECTOR?(3N)GRAPHIC?
S3	124729	2D OR (TWO OR 2)()DIMENSION? OR RASTER?
S4	67	RENDER?(5N)OBJECT??(7N)S1
S5	10828	RGB OR RED()GREEN()BLUE
S6	58095	(IMAG? OR DITHER?)(3N)PROCESS?
S7	332990	(BINARIZATION OR FILTER? OR BLACK()CHARACTER?()EXTRACT? OR ERROR()DIFFUSION)
S8	190	(UCR OR UNDER() (COLOR OR COLOUR) ()REMOVAL) (3N)PROCESS?
S9	59593	(DETERMIN? OR DISCERN? OR DETECT? OR EVALUAT?)(5N)(S1 OR S2 OR MONOCHROME? OR IMAG?? OR CHARACTER??)
S10	18265	OBJECT?(5N)(ATTRIBUT? OR COLOUR? OR COLOR? OR VECTOR? OR C- HARACTER??)
S11	8894	(OVERLAP? OR OVER()LAP? OR OVERLAY? OR OVER()LAY?)(5N)(IMA- GE?? OR PICTURE? OR PHOTOS OR PHOTO OR GRAPHIC??)
S12	62175	PIXEL?? OR PICTURE()ELEMENT? OR PEL
S13	19450	(RESOLUTION OR TONE??)(5N)(MODIF? OR CHANG? OR CONVERT? OR CONVERS? OR ALTER? OR ADJUST?)
S14	14203	S12(7N)(POSITION? OR PLACEMENT? OR LOCATION?)
S15	190544	IC=(H04N? OR B41J? OR G06F? OR G06T?)
S16	845	S9(S)S10
S17	2	S16(S)S11(S)S13
S18	8	S4(S)S6:S8
S19	8	S18 NOT S17
S20	70	S11(5N)S14
S21	1	S20(S)S5
S22	1	S21 NOT (S18 OR S17)
S23	2	S4(S)S5
S24	1	S23 NOT (S21 OR S18 OR S17)
S25	3801	(DETERMIN? OR DISCERN? OR DETECT?)(5N)(CHARACTER?? OR TEXT OR WORD??)(10N)(IMAGE?? OR GRAPHIC?? OR PICTURE? OR PHOTO OR - PHOTOS)
S26	96	S25(10N)S10
S27	4	S26(S)S14
S28	3	S27 NOT (S23 OR S21 OR S18 OR S17)
S29	2	S26(S)S13
S30	0	S29 NOT (S27 OR S23 OR S21 OR S18 OR S17)
S31	92	(S20 OR S26) AND S15
S32	88	S31 NOT (S27 OR S23 OR S21 OR S18 OR S17)
S33	6	S32(10N)PRINT?
S34	15	S5(10N)S11(5N)S12
S35	0	S34(10N)S1(S)S2
S36	1	S34(10N)S9
S37	1	S36 NOT (S23 OR S21 OR S18 OR S17)

17/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00984073 \*\*Image available\*\*

**PRINTING CARTRIDGE WITH TWO DIMENSIONAL CODE IDENTIFICATION**  
**CARTOUCHE D'IMPRESSION A IDENTIFICATION DE CODE A DEUX DIMENSIONS**

Patent Applicant/Assignee:

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(Designated only for: US)

Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200313869 A2-A3 20030220 (WO 0313869)  
Application: WO 2002AU915 20020709 (PCT/WO AU0200915)  
Priority Application: US 2001922159 20010806

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 142147

Fulltext Availability:

Detailed Description

Detailed Description

... Artcards 9 process the image in such a way as to obscure the lack of  
**resolution** . For example, if the image is distorted to simulate the  
effect of being converted to...printed resolution in each dimension,  
requiring 9 pixels to define a single dot. If the **resolution** of the  
**alternative** Artcard dots is 1600 dpi, the alternative Artcard reader's  
image sensor must scan pixels...CCD image sensor. The card is sampled in  
each dimension at three times the printed **resolution** . **Alternative**  
Artcard reading hardware and software compensate for rotation up to 1  
degree, jitter and vibration...indicated in Fig. 67.  
The decoding process requires the following steps.

Scan 1 144 the **alternative** Artcard at three times printed **resolution**  
(eg scan 1600 dpi **alternative** Artcard at  
4800 dpi)

Extract 1145 the data bitmap from the scanned dots on the...the  
alternative Artcard.

Locate the Start of the alternative Artcard

The scanned pixels outside the **alternative** Artcard area are black (the  
surface can be black plastic or some other non-reflective...source, the  
lighting vector L and attenuation factor fatt change for each pixel  
across an **image** . Therefore both L and fatt must be calculated for each



.pixel.

No BI Limp MaR...

17/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00909145 \*\*Image available\*\*

**PLANAR LASER ILLUMINATION AND IMAGING (PLIIM) SYSTEMS WITH INTEGRATED  
DESPECKLING MECHANISMS PROVIDED THEREIN  
SYSTEMES PLIIM D'ILLUMINATION ET D'IMAGERIE AU LASER PLANAIRE A MECANISME  
DE DECHATOIEMENT INTEGRE**

Patent Applicant/Assignee:

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 Soundview Plaza, 1266 East Main Street, Stamford, CT 06902, US,  
 Patent and Priority Information (Country, Number, Date):  
 Patent: WO 200243195 A2-A3 20020530 (WO 0243195)  
 Application: WO 2001US44011 20011121 (PCT/WO US0144011)  
 Priority Application: US 2000721885 20001124; US 2001780027 20010209; US  
 2001781665 20010212; US 2001883130 20010615; US 2001954477 20010917; US  
 2001999687 20011031  
 Parent Application/Grant:  
 Related by Continuation to: US 2001954477 20010917 (CIP)  
 Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
 CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
 KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD  
 SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
 (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
 (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
 (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
 (EA) AM AZ BY KG KZ MD RU TJ TM  
 Publication Language: English  
 Filing Language: English  
 Fulltext Word Count: 298301  
 Fulltext Availability:  
 Claims

# Claim

... D PLIB micro-oscillation mechanism arranged with each PLIM, and  
 employing a micro-oscillating high- **resolution** deformable mirror  
 structure as shown in Figs. 117A through 117C, a stationary PUB  
 reflecting element...target object are computed, and these computed  
 points of intersection used to produce a high- **resolution** 3-D image of  
 the target object; Fig. 23C1 through 23C5, taken together, set forth...  
 detection array with vertically-elongated image detection elements and  
 variable focal length/variable focal distance **image** forinatio

n optics, (ii) an ambient-light  
 driven object detection subsystem within its hand-supportable...

?

19/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01433369

**Network interface for document processing devices**  
**Netzwerkschnittstelle fur dokumentverarbeitende Gerate**  
**Interface de reseau pour appareils de traitement de documents**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 1213645 A2 020612 (Basic)

APPLICATION (CC, No, Date): EP 2001128911 011205;

PRIORITY (CC, No, Date): US 731205 001206

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-003/12

ABSTRACT WORD COUNT: 126

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200224	579
SPEC A	(English)	200224	4079
Total word count - document A			4658
Total word count - document B			0
Total word count - documents A + B			4658

...SPECIFICATION the last time stamp for a service action.

Image Processing

The prior practice of the **image processing** community was to attempt  
to assess the nature of images from their **bit - maps** . This information  
is important for **Object -Oriented Rendering** (OOR). In OOR, different  
segments of a page may be rendered differently in order to...

19/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01146343

**Image processing method, system and apparatus, and storage medium**  
**Bildverarbeitungsverfahren, -system und -gerat, und Speichermedium**  
**Methode, systeme et appareil de traitement d'image, et moyen**  
**d'enregistrement**

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,

Tokyo, (JP), (Applicant designated States: all)  
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, (JP)  
Ohta, Ken-ichi, c/o Canon K.K., 30-2, 3-chome Shimomaruko, Ohta-ku, Tokyo  
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Court, High Holborn, London WC1R 5DH, (GB)  
PATENT (CC, No, Kind, Date): EP 999522 A2 000510 (Basic) NO  
EP 999522 A3 020814  
APPLICATION (CC, No, Date): EP 99308834 991105;  
PRIORITY (CC, No, Date): JP 98316725 981106; JP 98316726 981106; JP  
99305430 991027  
DESIGNATED STATES: DE; FR; GB  
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI  
INTERNATIONAL PATENT CLASS: G06T-011/00; H04N-001/40  
ABSTRACT WORD COUNT: 114  
NOTE:  
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200019	1342
SPEC A	(English)	200019	9607
Total word count - document A			10949
Total word count - document B			0
Total word count - documents A + B			10949

...SPECIFICATION 304 which a rendering engine can interpret and adding  
object information (Flag) 305 (For the **object** information, see Fig. 31  
to be described later); 306, a **rendering** engine; 307, a **bitmap** image  
of (8 bits for each of RGB colors + **object** information bit (Flag) 3  
bits)/pixel; and 308, a pre- **processing** module for performing **image**  
**processing** for printing the bitmap image 307 with a printer engine 309.  
Fig. 30 shows an...

...information flag 305 on the basis of the interpretation result (step  
S506). The rendering 306 **renders** the instruction 304 and the **object**  
information flag 305 to prepare the **bitmap** image 307 (step S507). At  
this time, the **rendering object** is only the instruction 304, and the  
object information flag 305 is passed through as...

...to each pixel of the rendering result. The pre-processing unit 308  
subjects the bitmap **image** 307 to pre- **processing** for printing by the  
engine 309 (step S508). Concretely, RGB24Bit --> CMYK1Bit conversion  
(1-color conversion, **binarization** ) and black character treatment (in  
case of a color character whose pixel value gets closer...

19/3,K/3 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00833940

**System and method for using varied binarization processing to implement a  
printer driver architecture**

**System und Verfahren zur Implementierung einer Druckerarchitektur unter  
Verwendung veränderlicher Binarisierungsverarbeitung  
Methode et systeme d'utilisation de traitement de binarisation variee pour  
realiser une architecture de commande d'imprimante**

**PATENT ASSIGNEE:**

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**PATENT (CC, No, Kind, Date):** EP 772118 A1 970507 (Basic)

EP 772118 B1 030205

**APPLICATION (CC, No, Date):** EP 96307983 961101;

**PRIORITY (CC, No, Date):** US 7183 951101; US 573019 951215

**DESIGNATED STATES:** DE; FR; GB

**INTERNATIONAL PATENT CLASS:** G06F-003/12

**ABSTRACT WORD COUNT:** 88

**NOTE:**

Figure number on first page: 4

**LANGUAGE (Publication,Procedural,Application):** English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	581
CLAIMS B	(English)	200306	526
CLAIMS B	(German)	200306	458
CLAIMS B	(French)	200306	584
SPEC A	(English)	EPAB97	6433
SPEC B	(English)	200306	6750
Total word count - document A			7015
Total word count - document B			8318
Total word count - documents A + B			15333

...SPECIFICATION bilevel (on or off) planar (one plane for each RGB color component) pixel matrix.

If **render** driver 37 identifies a print **object** as being other than a device-independent **bitmap** (DIB), **image** /color **processor** 66, in step 136, determines whether the print object is a graphic print object or...

...object type 122 via escape signal 56. If step 136 identifies a graphic print object, **image** /color **processor** 66, in step 141, performs color processing using page data 52 including attributes 126 provided...

...SPECIFICATION bilevel (on or off) planar (one plane for each RGB color component) pixel matrix.

If **render** driver 37 identifies a print **object** as being other than a device-independent **bitmap** (DIB), **image** /color **processor** 66, in step 136, determines whether the print object is a graphic print object or...

...object type 122 via escape signal 56. If step 136 identifies a graphic print object, **image** /color **processor** 66, in step 141, performs color processing using page data 52 including attributes 126 provided...

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00741664

**Method and apparatus for producing a hybrid data structure for displaying a raster image**

**Verfahren und Gerat zur Erzeugung einer hybriden Datenstruktur zur Anzeige eines Rasterbildes**

**Procede et appareil pour la production d'une structure de donnees hybride pour l'affichage d'une image tramee**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 700197 A1 960306 (Basic)  
EP 700197 B1 000621

APPLICATION (CC, No, Date): EP 95305895 950823;

PRIORITY (CC, No, Date): US 298655 940831; US 420827 950410

DESIGNATED STATES: DE; FR; GB; IT; NL; SE

INTERNATIONAL PATENT CLASS: H04N-001/411; G06K-009/00

ABSTRACT WORD COUNT: 232

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200025	1135
CLAIMS B	(German)	200025	1069
CLAIMS B	(French)	200025	1405
SPEC B	(English)	200025	13406
Total word count - document A			0
Total word count - document B			17015
Total word count - documents A + B			17015

19/3,K/5 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00974210 \*\*Image available\*\*

**APPARATUS, METHOD AND SYSTEM WITH A GRAPHICS-RENDERING ENGINE HAVING A TIME ALLOCATOR**

**APPAREIL, PROCEDE ET SYSTEME A MOTEUR DE RENDU GRAPHIQUE EQUIPE D'UN ALLOCATEUR TEMPOREL**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200303313 A2-A3 20030109 (WO 0303313)  
Application: WO 2002US20781 20020628 (PCT/WO US0220781)  
Priority Application: US 2001895529 20010629  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 9527

Fulltext Availability:  
Detailed Description

Detailed Description

... rendering occurs during the conversion of a mathematical model of a three-dimensional I 0 **object** or scene into a **bitmap** image. Another example of image **rendering** is converting an HTML document into an image for display on a computer monitor. Typically,, a hardware device referred to as a graphics-rendering engine accelerates these graphics **processing** tasks.

[0031 Multiple **images** may be commonly viewed on a computer monitor when surfing the Internet. For example, a...

19/3,K/6 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00974197 \*\*Image available\*\*  
**APPARATUS, METHOD AND SYSTEM WITH A GRAPHICS-RENDERING ENGINE HAVING A GRAPHICS CONTEXT MANAGER**

**APPAREIL, PROCEDURE ET SYSTEME FAISANT APPEL A UN MOTEUR DE RENDU GRAPHIQUE PRESENTANT UN GESTIONNAIRE DE CONTEXTES**

Patent Applicant/Assignee:

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MALLIE Michael J (et al) (agent), Blakely, Sokoloff, Taylor & Zafman LLP,  
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US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200303206 A2-A3 20030109 (WO 0303206)  
Application: WO 2002US20682 20020628 (PCT/WO US0220682)  
Priority Application: US 2001895777 20010629  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 9131

Fulltext Availability:  
Detailed Description

Detailed Description

... of image rendering occurs during the conversion of a mathematical model of a three-dimensional **object** or scene into a **bitmap** image. Another example of image **rendering** is converting an HTML document into an image for display on a computer monitor. Typically, a hardware device referred to as a graphics-rendering engine accelerates these graphics **processing** tasks.

[003] Multiple **images** may be commonly viewed on a computer monitor when surfing the 1 5 Internet. For...

19/3,K/7 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00576381 \*\*Image available\*\*

**METHOD FOR ACCESSING AND RENDERING AN IMAGE**  
**PROCEDE D'ACCES A UNE IMAGE ET DE RENDU D'UNE IMAGE**

Patent Applicant/Assignee:

TRUESPECTRA INC,  
SUTHERLAND Stephen B,  
WICK Dale M,  
GIGNAC John-Paul J,  
COULOMBE Sam D,

Inventor(s):

SUTHERLAND Stephen B,  
WICK Dale M,  
GIGNAC John-Paul J,  
COULOMBE Sam D,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200039754 A1 20000706 (WO 0039754)  
Application: WO 99CA1216 19991223 (PCT/WO CA9901216)  
Priority Application: CA 2256970 19981223

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ  
MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ  
CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English  
Fulltext Word Count: 9996

Fulltext Availability:  
Claims

Claim

... the object to allow the  
object to output a scanline, and data information of the  
**object** which includes defining the data information using  
vector based techniques or **bitmap** techniques;  
the definition of each **object** including **rendering**



information which allows assessment of the interaction of the particular object with other objects without...

...repeating the process until the highest ranked active object produces the particular scanline of the **image** , and repeating the **process** for the next scanline of the image until the entire image has been rendered.  
10...

19/3,K/8 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00280298 \*\*Image available\*\*

**INTERACTIVE IMAGE SYNTHESIS AND PROCESSING**  
**TRAITEMENT ET SYNTHESE INTERACTIFS D'IMAGES**

Patent Applicant/Assignee:

CAMBRIDGE ANIMATION SYSTEMS LIMITED,  
BEREND Andrew Louis Charles,  
WILLIAMS Mark Jonathan,  
BROCKLEHURST Michael John,

Inventor(s):

BEREND Andrew Louis Charles,  
WILLIAMS Mark Jonathan,  
BROCKLEHURST Michael John,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9428476 A2 19941208

Application: WO 94GB1148 19940526 (PCT/WO GB9401148)

Priority Application: GB 9310940 19930527

Designated States: GB JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 5665

Fulltext Availability:

Detailed Description

Detailed Description

... interactive image generation and processing, particularly but not exclusively for use in computer illustration.

Digital **image processing** apparatus is known which allows an artist to produce images by creating objects and defining...

...curves. The image is created by a rendering process which takes the data defining these **objects** and produces a raster image at the desired resolution. Each **object** is **rendered** into a partial raster image ("**bit map**" image) defining colour and opacity for an array of picture elements ("pixels"), and this partial...

?

22/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00835871 \*\*Image available\*\*

**METHODS AND APPARATUS FOR IMAGE ANALYSIS**

**PROCEDES ET APPAREIL D'ANALYSE D'IMAGES**

Patent Applicant/Assignee:

CORNING INCORPORATED, One Riverfront Plaza, Corning, NY 14831, US, US  
(Residence), US (Nationality)

Inventor(s):

TANNER Cameron Wayne, 37 Pine Forest Drive, Horseheads, NY 14845, US,  
TEPESCH Patrick David, 179 Watauga Avenue, Corning, NY 14830, US,

Legal Representative:

JACKSON Robert J (et al) (agent), c/o Fish & Neave, 1251 Avenue of the  
Americas, New York, NY 10020, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200169534 A2-A3 20010920 (WO 0169534)

Application: WO 2001US7711 20010309 (PCT/WO US0107711)

Priority Application: US 2000188398 20000310

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 76940

Fulltext Availability:

Detailed Description

Detailed Description

... the actual position of a  
5 spot on an unaligned image (rur cu) and aligned  
**position** (ru cu where (ru\*, Cu\*) is calculated with  
the transformation matrix using the **position** of the  
same spot on the reference **image** (rrf Cr) , may be the  
following.

2 2 2

d (r U-ru) + (C\*U...p[Ol.spots per column];

return(pr\*p[ol.pins

per-row+pc);

int get

**rgb** (int \*r,

int \*g,

int \*b,

int v,

int max)

double third, maxd, vd;

maxd...nII, w, h,

max);

for(i=0; i<n; i++)

if(s[i]>=0)

get

**rgb** (&r, &g, &b, s [ij , max)

is fprintf(f, II @'o i O@o i...

24/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01652099

Preparation of print bitmap from colour and monochrome data  
Druckrasterbildvorbereitung aus Farbdaten und monochromen Daten  
Preparation d'image d'impression en trame a partir de donnees en couleur et  
en noir et blanc

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (Applicant designated States: all)

INVENTOR:

Ooki, Jouji, Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko, Ohta-ku,  
Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick  
Court, High Holborn, London WC1R 5DH, (GB)

PATENT (CC, No, Kind, Date): EP 1359537 A2 031105 (Basic)

APPLICATION (CC, No, Date): EP 2003252367 030414;

PRIORITY (CC, No, Date): JP 2002129082 020430

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS: G06K-015/02

ABSTRACT WORD COUNT: 59

NOTE:

Figure number on first page: 5

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200345	1061
SPEC A	(English)	200345	7229
Total word count - document A			8290
Total word count - document B			0
Total word count - documents A + B			8290

...CLAIMS pixel is a color pixel or a monochrome pixel and information  
indicating the type of **rendering object**.

3. The information processing apparatus according to Claim 1, wherein the  
first- **bitmap** generating means generates the first bitmap image  
having an **RGB** color space, and the determination means determines  
that the pixel is a monochrome pixel when...

?

28/3,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00987964

Video-game apparatus, method of processing video game image, and  
computer-readable recording medium with stored video game program

Videospielgerät, Videospielbildverarbeitungsmethode, und rechnerlesbares  
Aufzeichnungsmedium mit gespeichertem Videospielprogramm

Appareil de jeu video, methode de traitement d'image de jeu video, et  
support d'enregistrement lisible par ordinateur contenant un jeu video

PATENT ASSIGNEE:

Konami Co., Ltd., (1897210), 3-2, Minatojimanakamachi 7-chome, Chuo-ku,  
Kobe-shi, Hyogo-ken, (JP), (Proprietor designated states: all)

INVENTOR:

Morihira, Shigeki, 5-16, Tachibanacho 1-chome, Amagasaki-shi, Hyogo-ken,  
(JP)

LEGAL REPRESENTATIVE:

Muller-Bore & Partner Patentanwalte (100651), Grafinger Strasse 2, 81671  
Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 893149 A2 990127 (Basic)

EP 893149 A3 010307

EP 893149 B1 030108

APPLICATION (CC, No, Date): EP 98113784 980723;

PRIORITY (CC, No, Date): JP 97200663 970725

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: A63F-013/00; G06T-015/50

ABSTRACT WORD COUNT: 110

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199904	1100
CLAIMS B	(English)	200302	1102
CLAIMS B	(German)	200302	1025
CLAIMS B	(French)	200302	1268
SPEC A	(English)	199904	11531
SPEC B	(English)	200302	11550
Total word count - document A			12633
Total word count - document B			14945
Total word count - documents A + B			27578

...SPECIFICATION method of processing a game cage displayed on a display screen and including a game **character** movable in a pseudo-three-dimensional space containing an object model, comprising the steps of: **determining** distances from the viewpoint of a hypothetical camera which is capturing an image of a game **character** to **pixels** of an **object** model **positioned** forward of the game character as viewed from the viewpoint of the hypothetical camera; determining...

...SPECIFICATION laterally at all times.

Furthermore, the present invention provides a method of processing a game **image** displayed on a display screen and including a game character movable in a pseudo-three-dimensional space containing an object model, comprising the steps of: **determining** distances from the viewpoint of a hypothetical camera which is capturing an **image** of a game **character** to **pixels** of an **object** model **positioned** forward of the game

character as viewed from the viewpoint of the hypothetical camera;  
determining...

28/3,K/2 (Item 2 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

00289399

Method and apparatus for recognising characters printed on a document.  
Verfahren und Gerat zur Erkennung von gedruckten Zeichen auf einem Beleg.  
Procede et appareil de reconnaissance de caracteres imprimes sur un  
document.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,  
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Mano, Takashi, Ohmurasou 2goh 932-1 Takakura, Fujisawa-shi Kanagawa-ken,  
(JP)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual  
Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 287027 A2 881019 (Basic)

EP 287027 A3 910710

EP 287027 B1 930901

APPLICATION (CC, No, Date): EP 88105799 880412;

PRIORITY (CC, No, Date): JP 8793435 870417

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/32;

ABSTRACT WORD COUNT: 378

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1085
CLAIMS B	(German)	EPBBF1	1046
CLAIMS B	(French)	EPBBF1	1134
SPEC B	(English)	EPBBF1	6949
Total word count - document A			0
Total word count - document B			10214
Total word count - documents A + B			10214

...SPECIFICATION long lines, a photograph, etc. which are smaller or larger  
than expected sizes of the **characters** and symbols to be recognized by  
the character recognition unit 31. The character position detect...

...character position detect means 24, it detects the black pel of the top  
of the **character** A. As the subsequent bit **line** group 41 are  
supplied to the **character** position **detect** device 24, it generates a  
rectangle 42. The **character** position **detect** device 24 determines  
the continuity of the black pels or the image in the **supplied** bit  
lines, and grows up the rectangle if it detects the **continuity**.  
Referring to the Fig. 4, the rectangle is gradually grown up as shown by  
43...

...46.

The character position detect device 24 detects the lack of continuity  
of the black **pel** in the **Y** direction by determining the bit line 2C+1,  
i.e. next bit line to the...

28/3,K/3 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00194430

**METHOD FOR IDENTIFICATION AND SEGMENTATION OF TOUCHING CHARACTERS**  
**PROCEDE D'IDENTIFICATION ET DE SEGMENTATION DE CARACTERES SE TOUCHANT**

Patent Applicant/Assignee:

EASTMAN KODAK COMPANY,

Inventor(s):

LEE Yongchun,

ASSAD Andrew Matthias,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9111781 A1 19910808

Application: WO 91US577 19910130 (PCT/WO US9100577)

Priority Application: US 90188 19900202

Designated States: AT BE CH DE DK ES FR GB GR IT JP LU NL SE

Publication Language: English

Fulltext Word Count: 4482

Fulltext Availability:

Detailed Description

Detailed Description

... 210, An outer contour

processor 215, using contour vectorization techniques well-known in the art, **determines** the outline of the outer contour of the object comprising contiguous "ON" pixels in the **character image**. This outline is simply a listing of the locations of the locations in the **image** forming the outline of the **object**, The contour **vectorization** techniques employed by the outer contour processor 215 are described in the following three publications...the outer contour processor 215. The outlines of the inner contours are simply listings of **pixel locations** in the character image which outline the closed inner contours, An inner contour analyzer 230...

?

33/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01146623

METHOD AND APPARATUS FOR PRINTING ON ENDLESS MEDIUM, METHOD AND APPARATUS  
FOR ROTARY PRINTING, AND ROTARY PRINTING HEAD  
VERFAHREN UND GERAT ZUM DRUCKEN AUF ENDLOSEM MATERIAL, VERFAHREN UND GERT  
ZUM ROTATIONSDRUCK UND ROTATIONSDRUCKKOPF  
PROCEDE ET APPAREIL POUR IMPRIMER SUR UN SUPPORT SANS FIN, PROCEDE ET  
APPAREIL D'IMPRESSION ROTATIVE, ET TETE D'IMPRESSION ROTATIVE

PATENT ASSIGNEE:

STAR MICRONICS CO., LTD., (1170462), 20-10, Nakayoshida, Shizuoka-shi,  
Shizuoka-ken 422-8654, (JP), (Applicant designated States: all)

INVENTOR:

NAGAI, Kenichi, Star Micronics Co., Ltd., 20-10, Nakayoshida,  
Shizuoka-shi, Shizuoka 422-8654, (JP)  
TSUKUDA, Yasunori, Star Micronics Co., Ltd., 20-10, Nakayoshida,  
Shizuoka-shi, Shizuoka 422-8654, (JP)  
SAWAMOTO, Norihiro, Star Micronics Co., Ltd., 20-10, Nakayoshida,  
Shizuoka-shi, Shizuoka 422-8654, (JP)  
MITSUMORI, Yoshio, Star Micronics Co., Ltd., 20-10, Nakayoshida,  
Shizuoka-shi, Shizuoka 422-8654, (JP)

LEGAL REPRESENTATIVE:

Kinsler, Maureen Catherine et al (87471), Kilburn & Strode, 20 Red Lion  
Street, London WC1R 4PJ, (GB)

PATENT (CC, No, Kind, Date): EP 1110740 A1 010627 (Basic)  
WO 200013908 000316

APPLICATION (CC, No, Date): EP 99940459 990825; WO 99JP4567 990825

PRIORITY (CC, No, Date): JP 98248742 980902; JP 98305909 981027; JP  
98307475 981028

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: B41J-003/407; B41J-002/32; B41J-002/36;  
B41J-002/345

ABSTRACT WORD COUNT: 157

NOTE:

Figure number on first page: 0006

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200126	855
SPEC A	(English)	200126	10140
Total word count - document A			10995
Total word count - document B			0
Total word count - documents A + B			10995

...SPECIFICATION printing is carried out, as shown in FIG. 7B, the image  
data of an overlap- **printing** area Ra extending a predetermined length  
(corresponding to three **pixels** in this example) from the **printing**  
start **position** PS, the **image** data of the non- **overlap - printing**  
area and the **image** data of an **overlap - printing** area Rb extending a  
predetermined length (corresponding to three pixels in this example) from  
the...

33/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00728710

Print system and method for presenting required record time of print system  
Druckersystem und Verfahren zur Anzeige der erforderlichen Druckzeit des  
Druckers

Systeme et methode d'impression pour afficher le temps d'impression requis  
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

Yoshikawa, Naohiro, c/o Canon K.K., 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP)

LEGAL REPRESENTATIVE:

Leson, Thomas Johannes Alois, Dipl.-Ing. et al (78983), TBK-Patent, P.O.  
Box 20 19 18, 80019 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 687972 A1 951220 (Basic)  
EP 687972 B1 031022

APPLICATION (CC, No, Date): EP 95109099 950613;

PRIORITY (CC, No, Date): JP 94132184 940614; JP 95133729 950531

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G06F-003/12

ABSTRACT WORD COUNT: 147

NOTE:

Figure number on first page: 1

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1526
CLAIMS B	(English)	200343	1125
CLAIMS B	(German)	200343	1001
CLAIMS B	(French)	200343	1199
SPEC A	(English)	EPAB95	11525
SPEC B	(English)	200343	9768
Total word count - document A			13053
Total word count - document B			13093
Total word count - documents A + B			26146

...SPECIFICATION volatile memory.

In accordance with an eighth aspect of the present invention, the quantifying means **determines** the **character**, the bit map, the **image** of the **graphic** representation as the **attribute** of the draw **object** of the **print** data to be **printed** and quantifies the index representing the complexity for each attribute of the draw object.

In...

...allow reference with high reproducibility.

In the eighth aspect of the invention, the quantifying means **determines** one of the **character**, the bit map, the **image** and the **graphic** representation as the **attribute** of the draw **object** of the **print** data to be **printed** to allow the quantization to the index representing the complexity for each determined attribute of...Referring to Figs. 1, 2 and 8, the relation between the present embodiment and the **means** of the fourteenth **aspect** of the invention and the operations thereof **are** explained.

In the **fourteenth** aspect of the **present** invention, as **shown** in Fig. 1, **there** is provided a method for presenting a required record time of a print system having...

...SPECIFICATION allow reference with high reproducibility.

In an eighth embodiment of the invention, the quantifying means



determines one of the character , the bit map, the image and the graphic representation as the attribute of the draw object of the print data to be printed to allow the quantization to the index representing the complexity for each determined attribute of...

33/3,K/3 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00177965

Image processing system.

Bildverarbeitungssystem.

Systeme de traitement d'image.

PATENT ASSIGNEE:

FUJITSU LIMITED, (211460), 1015, Kamikodanaka Nakahara-ku, Kawasaki-shi  
Kanagawa 211, (JP), (applicant designated states: DE;FR;GB;IT;NL)

INVENTOR:

Iwase, Hiromichi, Saito Manshon 206 309, Noborito, Tama-ku Kawasaki-shi  
Kanagawa 214, (JP)

Sasaki, Shigeru, 9-11-1005, Kandaiji 2-chome Kanagawa-ku, Yokohama-shi  
Kanagawa 221, (JP)

Gotoh, Toshiyuki, 708, 12-68, Yashio 5-chome, Shinagawa-ku Tokyo 140,  
(JP)

Toriu, Takashi, Monteberude Tamagawa 402 442-9, Seki, Tama-ku  
Kawasaki-shi Kanagawa 214, (JP)

Ozaki, Tohru, 7-5, Chiyogaoka 2-chome Asao-ku, Kawasaki-shi Kanagawa 215,  
(JP)

LEGAL REPRESENTATIVE:

Rackham, Stephen Neil et al (35061), GILL JENNINGS & EVERY 53-64 Chancery  
Lane, London WC2A 1HN, (GB)

PATENT (CC, No, Kind, Date): EP 159879 A2 851030 (Basic)  
EP 159879 A3 880427  
EP 159879 B1 920819

APPLICATION (CC, No, Date): EP 85302581 850412;

PRIORITY (CC, No, Date): JP 8474443 840413

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G06F-015/68;

ABSTRACT WORD COUNT: 140

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1672
CLAIMS B	(German)	EPBBF1	1368
CLAIMS B	(French)	EPBBF1	2083
SPEC B	(English)	EPBBF1	9136
Total word count - document A			0
Total word count - document B			14259
Total word count - documents A + B			14259

...SPECIFICATION selected from the stored data.

An object of the present invention is to provide an image processing system for detecting and correcting distortion of the input image , for example density blur in a printed character , seal, or the like.

Another object of the invention is to provide an image verification system using an improved image processing...

33/3,K/4 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00984068      \*\*Image available\*\*

**PRINTING CARTRIDGE WITH RADIO FREQUENCY IDENTIFICATION  
CARTOUCHE D'IMPRESSION AVEC IDENTIFICATION PAR RADIOFREQUENCE**

Patent Applicant/Assignee:

SILVERBROOK RESEARCH PTY LTD, 393 Darling Street, Balmain, New South  
Wales 2041, AU, AU (Residence), AU (Nationality), (For all designated  
states except: US)

Patent Applicant/Inventor:

SILVERBROOK KIA, Silverbrook Research Pty Ltd, 393 Darling Street,  
Balmain, New South Wales 2041, AU, AU (Residence), AU (Nationality),  
(Designated only for: US)

Legal Representative:

SILVERBROOK KIA (agent), Silverbrook Research Pty Ltd, 393 Darling  
Street, Balmain, New South Wales 2041, AU,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200313864 A1 20030220 (WO 0313864)

Application: WO 2002AU913 20020709 (PCT/WO AU0200913)

Priority Application: US 2001922047 20010806

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU  
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP  
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO  
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 141831

Fulltext Availability:

Detailed Description

Detailed Description

... adding noise to an image, image enhancement filters, painting  
algorithms, brush jittering and manipulation edge **detection** filters,  
tiling, illumination via light sources, bump maps, **text**, face  
**detection** and **object detection attributes**, fonts, including three  
dimensional fonts, and arbitrary complexity pre-rendered icons. Further  
details of the...

**33/3,K/5      (Item 2 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT  
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00984064      \*\*Image available\*\*

**A PRINTING CARTRIDGE WITH SWITCH ARRAY IDENTIFICATION  
CARTOUCHE D'IMPRESSION AVEC IDENTIFICATION D'UNE MATRICE DE COMMUTATEURS**

Patent Applicant/Assignee:

SILVERBROOK RESEARCH PTY LTD, 393 Darling Street, Balmain, New South  
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(Designated only for: US)

Legal Representative:

SILVERBROOK Kia (agent), Silverbrook Research Pty Ltd, 393 Darling Street, Balmain, New South Wales 2041, AU,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 200313860 A1 20030220 (WO 0313860)  
Application: WO 2002AU1053 20020806 (PCT/WO AU0201053)  
Priority Application: US 2001922029 20010806  
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English  
Filing Language: English  
Fulltext Word Count: 142964

Fulltext Availability:  
Detailed Description

#### Detailed Description

... adding noise to an image, image enhancement filters, painting algorithms, brush jittering and manipulation edge **detection** filters, tiling, illumination via light sources, bump maps, **text**, face **detection** and **object detection attributes**, fonts, including three dimensional fonts, and arbitrary complexity pre-rendered icons. Further details of the...

33/3,K/6 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00984062 \*\*Image available\*\*

#### **IMAGE PRINTING APPARATUS INCLUDING A MICROCONTROLLER** **APPAREIL D'IMPRESSION D'IMAGES COMPRENANT UNE MICRO-UNITE DE COMMANDE**

Patent Applicant/Assignee:

SILVERBROOK RESEARCH PTY LTD, 393 Darling Street, Balmain, New South Wales 2041, AU, AU (Residence), AU (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

SILVERBROOK Kia, Silverbrook Research Pty Ltd, 393 Darling Street, Balmain, New South Wales 2041, AU, AU (Residence), AU (Nationality), (Designated only for: US)

Legal Representative:

SILVERBROOK Kia (agent), Silverbrook Research Pty Ltd, 393 Darling Street, Balmain, New South Wales 2041, AU,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200313858 A1 20030220 (WO 0313858)  
Application: WO 2002AU920 20020709 (PCT/WO AU0200920)  
Priority Application: US 2001922275 20010806

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW  
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM  
Publication Language: English

Filing Language: English  
Fulltext Word Count: 140412

Fulltext Availability:  
Detailed Description

Detailed Description

... adding noise to an image, image enhancement filters, painting algorithms, brush jittering and manipulation edge **detection** filters, tiling, illumination via light sources, bump maps, **text** , face **detection** and **object detection attributes** , fonts, including three dimensional fonts, and arbitrary complexity pre-rendered icons. Further details of the...

?

37/3,K/1 (Item 1 from file: 348)  
DIALOG(R) File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01434493

**Image processing method for detecting human figures in a digital image**  
**Bildverarbeitungsmethode zur Detektion menschlicher Figuren in einem**  
**digitalen Bild**

**Methode de traitement d'images pour detection de personnes dans une image**  
**numerique**

PATENT ASSIGNEE:

EASTMAN KODAK COMPANY, (201212), 343 State Street, Rochester, New York  
14650, (US), (Applicant designated States: all)

INVENTOR:

Luo, Jiebo, c/o Eastman Kodak Company, Patent Legal Staff, 343 State  
Street, Rochester, New York 14650-2201, (US)

LEGAL REPRESENTATIVE:

Weber, Etienne Nicolas et al (91684), Kodak Industrie, Departement  
Brevets, CRT, Zone Industrielle, 71102 Chalon sur Saone Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1215618 A2 020619 (Basic)

APPLICATION (CC, No, Date): EP 2001204655 011203;

PRIORITY (CC, No, Date): US 737026 001214

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06K-009/00; G06K-009/62

ABSTRACT WORD COUNT: 90

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200225	471
SPEC A	(English)	200225	5020
Total word count - document A			5491
Total word count - document B			0
Total word count - documents A + B			5491

...SPECIFICATION prior art. The need is met according to the present invention by providing a digital **image** processing method for **detecting** human figures in a digital color image having **pixels** representing RGB values, comprising the steps of: segmenting the **image** into non-**overlapping** regions of homogeneous color or texture; detecting candidate regions of human skin color; detecting candidate...

...color regions.

According to a feature of the present invention, there is provided a digital **image** processing method for **detecting** human figures in a digital color image having **pixels** representing RGB values, comprising the steps of:

providing a digital color image having **pixels** representing RGB values;

segmenting the digital color **image** into non- **overlapping** regions of homogeneous color or texture;

detecting candidate regions of human skin color;

detecting candidate...

...CLAIMS factor graph in which the links are function nodes specified by a set of pre- **determined** functions.

13. A digital **image** processing method for **detecting** human figures in a digital color image having **pixels** representing RGB values, comprising the steps of:  
providing a digital color image having **pixels** representing **RGB** values;  
segmenting the digital color **image** into non- **overlapping** regions of homogeneous color or texture;  
selecting a region as a candidate face region;  
attempting...

?

File 9:Business & Industry(R) Jul/1994-2004/Jan 08  
(c) 2004 Resp. DB Svcs.  
File 15:ABI/Inform(R) 1971-2004/Jan 10  
(c) 2004 ProQuest Info&Learning  
File 16:Gale Group PROMT(R) 1990-2004/Jan 12  
(c) 2004 The Gale Group  
File 20:Dialog Global Reporter 1997-2004/Jan 12  
(c) 2004 The Dialog Corp.  
File 47:Gale Group Magazine DB(TM) 1959-2004/Jan 02  
(c) 2004 The Gale group  
File 75:TGG Management Contents(R) 86-2004/Jan W1  
(c) 2004 The Gale Group  
File 80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jan 12  
(c) 2004 The Gale Group  
File 88:Gale Group Business A.R.T.S. 1976-2004/Jan 12  
(c) 2004 The Gale Group  
File 98:General Sci Abs/Full-Text 1984-2003/Nov  
(c) 2003 The HW Wilson Co.  
File 112:UBM Industry News 1998-2004/Jan 12  
(c) 2004 United Business Media  
File 141:Readers Guide 1983-2003/Nov  
(c) 2003 The HW Wilson Co  
File 148:Gale Group Trade & Industry DB 1976-2004/Jan 12  
(c)2004 The Gale Group  
File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group  
File 275:Gale Group Computer DB(TM) 1983-2004/Jan 12  
(c) 2004 The Gale Group  
File 264:DIALOG Defense Newsletters 1989-2004/Jan 09  
(c) 2004 The Dialog Corp.  
File 484:Periodical Abs Plustext 1986-2004/Jan W1  
(c) 2004 ProQuest  
File 553:Wilson Bus. Abs. FullText 1982-2003/Nov  
(c) 2003 The HW Wilson Co  
File 570:Gale Group MARS(R) 1984-2004/Jan 12  
(c) 2004 The Gale Group  
File 608:KR/T Bus.News. 1992-2004/Jan 12  
(c)2004 Knight Ridder/Tribune Bus News  
File 620:EIU:Viewswire 2004/Jan 09  
(c) 2004 Economist Intelligence Unit  
File 613:PR Newswire 1999-2004/Jan 12  
(c) 2004 PR Newswire Association Inc  
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Jan 12  
(c) 2004 The Gale Group  
File 623:Business Week 1985-2004/Jan 10  
(c) 2004 The McGraw-Hill Companies Inc  
File 624:McGraw-Hill Publications 1985-2004/Jan 10  
(c) 2004 McGraw-Hill Co. Inc  
File 634:San Jose Mercury Jun 1985-2004/Jan 10  
(c) 2004 San Jose Mercury News  
File 635:Business Dateline(R) 1985-2004/Jan 10  
(c) 2004 ProQuest Info&Learning  
File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 12  
(c) 2004 The Gale Group  
File 647:CMP Computer Fulltext 1988-2004/Jan W1  
(c) 2004 CMP Media, LLC  
File 696:DIALOG Telecom. Newsletters 1995-2004/Jan 12  
(c) 2004 The Dialog Corp.  
File 674:Computer News Fulltext 1989-2004/Jan W1  
(c) 2004 IDG Communications  
File 810:Business Wire 1986-1999/Feb 28

(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
? ds

Set	Items	Description
S1	27450	BITMAP?? OR BIT()MAP??
S2	9804	VECTOR?(3N)GRAPHIC?
S3	263597	2D OR (TWO OR 2)()DIMENSION? OR RASTER?
S4	75	RENDER?(5N)OBJECT??(7N)S1
S5	35191	RGB OR RED()GREEN()BLUE
S6	197353	(IMAG? OR DITHER?) (3N)PROCESS?
S7	692316	(BINARIZATION OR FILTER? OR BLACK()CHARACTER?()EXTRACT? OR ERROR()DIFFUSION)
S8	35	(UCR OR UNDER() (COLOR OR COLOUR) ()REMOVAL) (3N)PROCESS?
S9	48992	(DETERMIN? OR DISCERN? OR DETECT? OR EVALUAT?) (5N) (S1 OR S2 OR MONOCHROME? OR IMAG?? OR CHARACTER??)
S10	36869	OBJECT?(5N) (ATTRIBUT? OR COLOUR? OR COLOR? OR VECTOR? OR C- HARACTER??)
S11	13561	(OVERLAP? OR OVER()LAP? OR OVERLAY? OR OVER()LAY?) (5N) (IMA- GE?? OR PICTURE? OR PHOTOS OR PHOTO OR GRAPHIC??)
S12	163341	PIXEL?? OR PICTURE()ELEMENT? OR PEL
S13	77460	(RESOLUTION OR TONE??) (5N) (MODIF? OR CHANG? OR CONVERT? OR CONVERS? OR ALTER? OR ADJUST?)
S14	3123	S12(7N) (POSITION? OR PLACEMENT? OR LOCATION?)
S15	292	AU=(OHTA, K? OR YAMAGATA, S? OR HARADA, T? OR MATSUMOTO, A? OR OHTA K? OR YAMAGATA S? OR HARADA T? OR MATSUMOTO A?)
S16	1	S1(S)S2(S)S3(S)S5
S17	0	S6:S8(S)S9(S)S10(S)S11(S)S14
S18	4217	S6:S8(S)S9
S19	17	S18(S)S10
S20	0	S19(S)S11
S21	0	S19(S)S14
S22	0	S19(S)S13
S23	1	S19 AND PY=2000:2004
S24	16	S19 NOT S23
S25	13	RD S24 (unique items)
S26	1171	S1(S)S2
S27	0	S26 AND S15
S28	0	S15 AND S1
S29	0	S15 AND S4
S30	0	S15 AND S13
S31	15	S18(S)S11
S32	0	S31(S)S13
S33	1	S31(S)S14
S34	14	S31 NOT (S19 OR S33)
S35	12	RD S34 (unique items)



16/3,K/1 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

02875319 Supplier Number: 43875401 (USE FORMAT 7 FOR FULLTEXT)

**KEEPING UP THE RAPPORT**

UNIX News, p55

June, 1993

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 1393

... MacWrite II, Microsoft Word (Mac, PC and Windows), MultiMate (and Advantage), PICT, Postscript, Silicon Graphics ( **rgb** ), Sun **Raster** , Sun/NeXT audio, TIFF, Windows 3.0 ( **bitmap** and Metafile), WordPerfect (5.1; **raster** and **vector graphics** ) and XBM.

Rapport is an office tool, not groupware. For example, different users cannot work...

?

25/3,K/1 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2004 Resp. DB Svcs. All rts. reserv.

1562622 Supplier Number: 01562622  
**Sharp Offers Faster, Cheaper Image Processing Board for Industrial Use**  
(Sharp introduces graded image processing board that runs at twice the speed of former devices and at half the cost)  
Japan Industrial Journal, p 8  
July 23, 1996  
DOCUMENT TYPE: Business Newspaper (Japan)  
LANGUAGE: Japanese RECORD TYPE: Abstract

ABSTRACT:  
At the end of this month, Sharp is due to begin sales of a graded **image processing** board that runs at twice the speed of former devices and at half the cost...

...it can be used for inspecting the shape of items being manufactured, determine locations of **objects**, and verify written **characters**. The price of a hardware-software system is 649,000 yen. Sharp will produce 500 systems a month. The board uses a high-speed RISC processor and a 1-chip **image processing** LSI. It also features a new LSI for matching graded **images** that increase **processing** speed for **determination** of position. The system comes with software including a Japanese language menu for easy operation. ...

25/3,K/2 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01573854 02-24843  
**Image retrieval by color semantics with incomplete knowledge**  
Corridoni, Jacopo M; Del Bimbo, Alberto; Vicario, Enrico  
Journal of the American Society for Information Science v49n3 PP: 267-282  
Mar 1998  
ISSN: 0002-8231 JRNL CODE: ASI

...ABSTRACT: from image databases faces the distance between low-level syntactic features that can be automatically **detected** by conventional **image processing** tools and high-level semantics which captures user's **filtering** intentions. A system is presented which bridges this gap by resorting to a theory formulated...

... Johannes Itten in 1960, and widely accepted in the community of fine arts, to support **objective** interpretation of **color** arrangements over paintings. ...

25/3,K/3 (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

05208055 Supplier Number: 47944252 (USE FORMAT 7 FOR FULLTEXT)  
**TECHNOLOGY IMPROVES THE COLOUR PURITY OF RECYCLED GLASS**  
Glass International, p51  
Sept, 1997  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade

Word Count: 878

... of two separate image systems with one high resolution sensor, one linescan interface and one **image processor**. A communications **processor** assimilates **evaluated** data. At the process interface a signal is emitted for each object to be separated...

...be recalled and permits systems tests to be conducted. The product stream containing the separated **objects** can be displayed on a **colour** monitor.

Criteria used to identify materials in the separation process include the brightness of a...

25/3,K/4 (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

03456360 Supplier Number: 44822995  
**Cognex Corp. - Company Report**  
Investext, p1-4  
July 7, 1994  
Language: English Record Type: Abstract  
Document Type: Magazine/Journal; Trade

ABSTRACT:

...by Henderson, B.A., et al

Machine vision systems typically consist of proprietary software for **image processing** and analysis, custom vision ASICs, application specific software tools, and a video input. When implemented...

...and ASIC s, perform image analysis to extract information. Vision systems are used to locate **objects**, read alphanumeric **characters**, measure dimensions, and **detect** flaws. Machine vision systems are currently being refined that should make powerful, easy to...

25/3,K/5 (Item 3 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

03456359 Supplier Number: 44822994  
**Cognex Corp. - Company Report >PG 1-4**  
Investext, pN/A  
July 7, 1994  
Language: English Record Type: Abstract  
Document Type: Magazine/Journal; Trade

ABSTRACT:

...by Henderson, B.A., et al

Machine vision systems typically consist of proprietary software for **image processing** and analysis, custom vision ASICs, application specific software tools, and a video input. When...

...and ASICs, perform image analysis to extract information. Vision systems are used to locate **objects**, read alphanumeric **characters**, measure dimensions, and **detect** flaws. Machine vision systems are currently being refined that should make powerful, easy to use...

25/3,K/6 (Item 4 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

01334565 Supplier Number: 41573697 (USE FORMAT 7 FOR FULLTEXT)  
**Kobe Steel Develops High-Speed Character Recognition System**  
Comline Industrial Machinery & Mechanical Engineering, p2  
Sept 28, 1990  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 166

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
...Steel, Ltd. (5406) has developed a high-speed character recognition system capable of reading alphanumeric **characters** imprinted on reflective **objects**, such as sheet metal, and on objects which provide little contrast, such as tires. The...

...scan method and consists of a line sensor with a narrow field of vision, an **image processing** device, a character recognition unit, and a personal computer. In tests, the firm claims that the system was able to **determine** the **characters** on a credit card in 0.5 sec and could read a car number plate...

25/3,K/7 (Item 1 from file: 88)  
DIALOG(R)File 88:Gale Group Business A.R.T.S.  
(c) 2004 The Gale Group. All rts. reserv.

04791875 SUPPLIER NUMBER: 20779432  
**Concepts in imaging and microscopy: color image processing for microscopy.**  
Castleman, Kenneth R.  
The Biological Bulletin, v194, n2, p100(7)  
April, 1998  
ISSN: 0006-3185 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 4037 LINE COUNT: 00317

... digitized images of cells stained with single fluorophores. They represent the relative contrast of different **colored objects** in each of the three **color** channels. Table I states, for example, that only 44% of a DAPI molecule's brightness...

...this example is relatively severe, and use of a monochrome camera with separate, optimized, color **filters**, for example, can produce better results. But color smear is intrinsic to the **imaging process** and is always present to some degree.

Table I  
Color spread matrix for the image...

25/3,K/8 (Item 1 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

04530756 SUPPLIER NUMBER: 08546435 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Micro-cameras direct fruit-picking robot.**  
Schneider, Richard  
Hydraulics & Pneumatics, v42, n2, p10(1)  
Feb, 1990

ISSN: 0018-814X      LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT  
WORD COUNT: 425      LINE COUNT: 00032

... sophisticated image-analysis unit uses three micro-cameras scanning the same area through different optical **filters**. The **color** of any **object** in the vision field can be characterized by the relative proportions of its brightness as seen through each of the **filters**. Signals from the cameras are sent to an electronics board that produces a composite image...

...ripe - color appear in black on a white ground. Finally, a microcomputer analyzes this simplified **image** to **detect** objects with the desired shape and dimensions, then records their positions.

The robot's major...

25/3,K/9      (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2004 The Gale Group. All rts. reserv.

04152855      SUPPLIER NUMBER: 08154313      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
A complete image processing software package ideal for both R&D and production. (VCS from Vision Dynamics)  
CCI-Canmaking & Canning International, v4, n5, p7(1)  
July, 1989  
ISSN: 0959-8200      LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT  
WORD COUNT: 541      LINE COUNT: 00045

... hardware registers, or by way of a serial link.  
Functions library  
There are over 180 **image processing** functions currently available in the VCS library. Amongst the categories of functions offered are: \* Edge **detection** \* **Object** and **character** recognition \* **Filtering** and convolution \* Histogram Functions  
Portability  
The package is written in 'C' for portability, as well...

25/3,K/10      (Item 1 from file: 621)  
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)  
(c) 2004 The Gale Group. All rts. reserv.

01048958      Supplier Number: 40132144      (USE FORMAT 7 FOR FULLTEXT)  
Primagraphics introduces new entry-level software package for VME boards  
PR Newswire, pN/A  
August 6, 1987  
Language: English      Record Type: Fulltext  
Document Type: Newswire; Trade  
Word Count: 436

... More than 150 image processing functions are curenly available in the library, including edge detection, **object** and **character** recognition, **filtering** and convolution, and histograms.

In devising VCS Vision Dynamics adopted a modular approach, so users  
...

25/3,K/11      (Item 1 from file: 624)  
DIALOG(R)File 624:McGraw-Hill Publications

(c) 2004 McGraw-Hill Co. Inc. All rts. reserv.

00764794

**COGNEX (CGNX, 24 3/4, NASDAQ)**

**EMERGING GROWTH**

S&P's Emerging & Special Situations May 20, 1996; Pg 5; Vol. 16, No. 5

Journal Code: ESS ISSN: 0882-5440

Section Heading: SPOTLIGHT RECOMMENDATION

Word Count: 2,310 \*Full text available in Formats 5, 7 and 9\*

BYLINE:

Mark S. Basham

May 14, 1996

TEXT:

... to a video camera, a machine vision system captures at a point in the manufacturing **process** an **image** of an object that is often passing through the camera's line of sight at...

... to extract information from that image. For example, a machine vision system can locate an **object**, read al-phanumeric **characters**, measure dimensions, or **detect** flaws. Once the machine vision system has collected and analyzed the data, it can...

**25/3,K/12 (Item 1 from file: 636)**

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

(c) 2004 The Gale Group. All rts. reserv.

02847103 Supplier Number: 45771122 (USE FORMAT 7 FOR FULLTEXT)

**NPES RELEASES INTERNATIONAL STANDARD WITH IMAGES ON CD-ROM.**

Communications Standards News, n208, pN/A

Sept 6, 1995

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 113

The images consist of eight natural and 10 test **objects**. The standard provides **color images** to be used for **evaluating** changes in **image** quality during **image processing**, coding, film recording and printing.

ISO/TC 130, the international graphic arts standards committee, developed...

**25/3,K/13 (Item 1 from file: 647)**

DIALOG(R)File 647:CMP Computer Fulltext

(c) 2004 CMP Media, LLC. All rts. reserv.

01081868 CMP ACCESSION NUMBER: WIN19960301S0129

**CorelXARA 1.1 - Accelerated Art** (Software)

James Bell

WINDOWS MAGAZINE, 1996, n 703, PG176

PUBLICATION DATE: 960301

JOURNAL CODE: WIN LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: WINLAB Reviews

WORD COUNT: 731

... rotate imported bitmaps, change bitmap color depths, adjust brightness and contrast, and apply special-effect **filters** such as

sharpen, blur and edge **detect** . You also can convert **bitmaps** into vector graphics using an included tracing utility, or use bitmaps as fills for **vector objects** . An unlimited undo feature for endless experimentation; solid drawing tools; precision down to 1/1000...  
?

33/3,K/1 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

02302856 84988055

**Mechatronics-based in-process verification for flexible manufacturing systems**

Mayor, Rhett; Bright, Glen

Assembly Automation v19n2 PP: 139 1999

ISSN: 0144-5154 JRNL CODE: AAU

WORD COUNT: 3539

...TEXT: between detection and localization and show that the performance of linear matched detection and localization **filters** cannot be matched by any other **filter** (including non-linear **filters** ), provided that the form of the edge signal and the noise spectrum are known. Optimum two-dimensional edge detection can be achieved by applying a one-dimensional matched **filter** in the edge normal direction and an orthogonal one-dimensional Wiener **filter** to provide a best estimate of the edge contour (Cox and Boie, 1987). An interpolation algorithm is applied to the zero crossover points from the **location filter** to allow for sub- **pixel** localization (Cox and Boie, 1987). Standard **image - processing** techniques are employed to **overlay** the intermediate CAD model of the part on to the generated intrinsic image. Inspection is...

?



35/3,K/1 (Item 1 from file: 9)  
DIALOG(R)File 9:Business & Industry(R)  
(c) 2004 Resp. DB Svcs. All rts. reserv.

3722832 Supplier Number: 03722832 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
**Diffraction metrology measures overlays down to 45 nm. (Inspection,  
Measurement & Test).**

Semiconductor International, v 26, n 4, p 36  
April 2003  
DOCUMENT TYPE: Journal ISSN: 0163-3767 (United States)  
LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 722

TEXT:  
...loaded, special box-in-box targets are examined using a white-light microscope, and the **images** are then **processed** to **determine** **overlay** error.

Although this has worked well, as we move toward implementing deep nanometer process levels...

35/3,K/2 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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02241264 84987880  
**A new approach to translational laminographic method for PCB inspection**  
Anonymous  
Circuit World v24n2 PP: 14-20 1998  
ISSN: 0305-6120 JRNL CODE: UAIQ  
WORD COUNT: 3963

...TEXT: 23; Element 23; 24; Element 24; 25; Element 25; 26; Element 26; Figure 5; The **process** of the **image** separation; 28; Element 28; Figure 6; Configuration of the X-ray imaging system. The dashed...

...b) centerline grey scale profiles; Figure 13; Test result for circle and rectangle pattern: (a) **overlapped image** obtained at proper position, (b) **overlapped image** obtained after moving XY table to **determined** position, (c) calibrated **image** of (a) image, (d) calibrated image of (b) image, (e) separated image of circle pattern, (f) separated image of rectangle pattern; Figure 14; **Filtered** test result for circle and rectangle pattern: (a) **filtered overlapped image** obtained at proper position and **filtered** by median **filter**, (b) **filtered overlapped image** obtained after moving XY table to determined position and **filtered** by median **filter**, (c) calibrated image of (a) image, (d) calibrated image of (b) image, (e) separated image...

... separated image of rectangle pattern; Figure 15; Test result for triangle and rectangle pattern: (a) **overlapped image** obtained at proper position, (b) **overlapped image** obtained after moving XY table to **determined** position, (c) calibrated **image** of (a) image, (d) calibrated image of (b) image, (e) separated image of triangle pattern, (f) separated image of rectangle pattern; Figure 16; **Filtered** test result for triangle and rectangle pattern: (a) **filtered overlapped image** obtained at proper position and **filtered** by median **filter**, (b) **filtered overlapped image** obtained after moving XY table to determined position and **filtered** by median **filter**, (c) calibrated image of (a) image, (d)

calibrated image of (b) image, (e) separated image...

... separated image of rectangle pattern; Figure 17; Test result for triangle and circle pattern: (a) **overlapped image** obtained at proper position, (b) **overlapped image** obtained after moving XY table to **determined** position, (c) calibrated **image** of (a) image, (d) calibrated image of (b) image, (e) separated image of triangle pattern, (f) separated image of circle pattern; Figure 18; **Filtered** test result for triangle and circle pattern: (a) **filtered overlapped image** obtained at proper position and **filtered** by median **filter**, (b) **filtered overlapped image** obtained after moving XY table to determined position and **filtered** by median **filter**, (c) calibrated image of (a) image, (d) calibrated image of (b) image, (e) separated image...

35/3,K/3 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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02028985 54457963  
**Corona exposed in broad daylight**  
Zorda, Phillip M; Harrison, Lee  
Transmission & Distribution World v52n5 PP: 72-75 May 2000  
ISSN: 1087-0849 JRNL CODE: TMD  
WORD COUNT: 1345

...TEXT: intensifier.

Although corona discharges can be seen in daylight by putting a solar blind-bandpass **filter** in front of a UV **image** intensifier, it is impossible to **determine** the exact location of the activity without the ability to **overlay** the limage of the corona over an image of the insulator or structure under scrutiny.

To solve...

35/3,K/4 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/Inform(R)  
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01505949 01-56937  
**Second generation video imaging technique for assessing dermal exposure (VITAE system)**  
Fenske, Richard A; Birnbaum, Shari G  
American Industrial Hygiene Association Journal v58n9 PP: 636-645 Sep 1997  
ISSN: 0002-8894 JRNL CODE: AIH  
WORD COUNT: 7000

...TEXT: television camera, with a Fujinon TV zoom lens (H6 x 12.5R); DT 2850/2851 **image processing** boards (Data Translation, Marlboro, Mass.); Trinitron PVM1342Q color video monitor; 60 Mbyte tape storage system...

... custom UV-A lamps, with 4 F40 BLB bulbs (black light) and UV-passing glass **filters**; custom-designed subject examination frame with 70 x 70 cm interior dimensions. The new system...

... custom-designed in the C programming language: VITAE-Pict for image acquisition; VITAE-Mape for **image** outline/ **overlay**; VITAE-Calc for

exposure **evaluation** and calculation; VITAETools for miscellaneous **image** analysis functions. The programs draw on subroutines provided in the DT-IRISTM software library (Version...

**35/3,K/5** (Item 1 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

10375286 Supplier Number: 99619051 (USE FORMAT 7 FOR FULLTEXT)  
**Diffraction metrology measures overlays down to 45 nm. (Inspection, Measurement & Test).**

Braun, Alexander E.  
Semiconductor International, v26, n4, p36(1)  
April, 2003  
Language: English Record Type: Fulltext  
Document Type: Magazine/Journal; Trade  
Word Count: 797

(USE FORMAT 7 FOR FULLTEXT)  
TEXT:  
...loaded, special box-in-box targets are examined using a white-light microscope, and the **images** are then lprocessed to **determine overlay** error.

**35/3,K/6** (Item 2 from file: 16)  
DIALOG(R)File 16:Gale Group PROMT(R)  
(c) 2004 The Gale Group. All rts. reserv.

03254906 Supplier Number: 44477687 (USE FORMAT 7 FOR FULLTEXT)  
**NASA Seeks Partner to Market New Thermal Bond Inspection System**  
NDT Update, v3, n3, pN/A  
March, 1994  
Language: English Record Type: Fulltext  
Document Type: Newsletter; Trade  
Word Count: 589

... images of the disbond with and without the Laplacian filter.  
The disbond could not be **discerned** in the unfiltered **image** due to the **overlap** of the effect from the two disbonds. The **filtered** image, however, clearly delineated the regions of disbond and fully resolved the two disbonds.  
Further...

**35/3,K/7** (Item 1 from file: 47)  
DIALOG(R)File 47:Gale Group Magazine DB(TM)  
(c) 2004 The Gale group. All rts. reserv.

05513717 SUPPLIER NUMBER: 57800482 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**INTEGRATED LIBRARY SYSTEM SOFTWARE FOR SMALLER LIBRARIES.**  
Beiser, Karl A.  
Library Technology Reports, 35, 4, 365  
July, 1999  
ISSN: 0024-2586 LANGUAGE: English RECORD TYPE: Fulltext  
WORD COUNT: 82294 LINE COUNT: 06591

... Circulation

Definable item types	x	x	x
Definable patron types	x	x	x
Store patron <b>photos</b>	x	x	x
Overdue lists	x	x	x
Overdue notices for mailing	x	x	x...

symbolologies, are used in libraries. Each is based on its own system for coding alphanumeric **characters** into a sequence of bars and spaces. Most automated systems support more than one symbology...

35/3,K/8 (Item 1 from file: 88)

DIALOG(R)File 88:Gale Group Business A.R.T.S.

(c) 2004 The Gale Group. All rts. reserv.

01695468 SUPPLIER NUMBER: 00638186

**Computer Recognition of Two Overlapping Parts Using a Single Camera.**

Berman, S.; Parikh, P.; Lee, C.S.G.

Computer, v18, n3, p70-80

March, 1985

ISSN: 0018-9162 LANGUAGE: English RECORD TYPE: Abstract

...ABSTRACT: with robots that can acquire, orient and transport those objects, manufacturing technology will be revolutionized. **Image processing** has been successful with non-overlapping objects by using histogram techniques to segment objects from...

...severely limited when trying to recognize overlapping parts because of the problem in segmenting the **image** or distinguishing between two **overlapping** pieces rather than one object. An algorithm has been devised that uses gray-scale vision...

...to recognize each object in its stable state. The next phase is divided into seven **processes**: **image** acquisition, edge **detection**, labeling, feature recognition, template matching, and object recognition and reconstruction. These processes are for the...

35/3,K/9 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB

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14734267 SUPPLIER NUMBER: 87427644 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**Dimensional metrology solutions. (Modern Equipment Review Spotlight:**

**Grinding). (advertisement)**

Pope, Shauna R.

Modern Machine Shop, 74, 12, 287(1)

May, 2002

ISSN: 0026-8003 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 271 LINE COUNT: 00025

... include the ability to record and store part program measurement sequences; easy-to-edit programming; **image processing**; electronic edge **detection**; "comparator style" **image overlay** function within the software; **image** archiving; adjustable crosshair targets; a user tutorial; CAD import and export; inch, metric, polar and...

35/3,K/10 (Item 1 from file: 160)

DIALOG(R)File 160:Gale Group PROMT(R)

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02422481

TRIFID Corporation of St. Louis, MO, announces the availability of a low cost family of image processing software packages compatible with the low cost Electrim

News Release November 22, 1989 p. 1

TRIFID Corporation of St. Louis, MO, announces the availability of a low cost family of image processing software packages compatible with the low cost Electrim Corporation EDC-1000 Electronic Imager. For less...

...900.00 an IBM PC with MCGA/VGA graphics can be turned into a color image processing workstation. The basic black and white, menu driven image processing set has modules for image processing, image editing/annotation and image analysis. The supplemental color module incorporates color image processing and preparation software for printing. An additional module is available for file conversion to and...

... TIFF & PCX formats, however, the EDC-1000 imager does not require this module. Algorithms include: image sharpening, image smoothing feature edge detectors, and local area tonal transfer curve enhancements, electronic cut and paste, image rescaling, bi-linear zooming, color graphic and textual overlays, mirror and reverse image functions, pixel level noise removal statistical computations histogram analysis absolute and relative density profiling, image...

... input image files, transformation to and from intensity hue and saturation (IHS) coordinates for color image processing transformation to cyan yellow, magenta and black color separations for printing and look up table...

35/3,K/11 (Item 2 from file: 160)

DIALOG(R)File 160:Gale Group PROMT(R)

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02285994

IMAGEWISE/PC BREAKS NEW GROUND IN LOW-COST, HIGH-PERFORMANCE VIDEO DIGITIZING

News Release June 17, 1989 p. 1

... 255 with 256 grayscale levels. In addition to video digitizing, ImageWise/PC will perform video overlays, where a digitized image is displayed "on top off" a live analog signal, or vice versa. This capability is...

... presentations, or publications. The capabilities of the ImageWise/PC hardware are enhanced by the advanced image processing software bundled with every ImageWise/PC. The software, which supports EGA and VGA displays in addition to the ImageWise/PC native display mode, performs over 20 separate image processing functions including histogram equalization and linearization, pixellation, outline detection, image merging and combination, and matrix convolution. ...

35/3,K/12 (Item 1 from file: 636)

DIALOG(R)File 636:Gale Group Newsletter DB(TM)

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03003458 Supplier Number: 46126643 (USE FORMAT 7 FOR FULLTEXT)

**NATO Commander Discusses JSTARS Role In Watching Grave Sites**

Defense Week, v17, n6, pN/A

Feb 5, 1996

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 597

... the disposition of forces. We are going to continue to do that."

The JSTARS sensor **detects** and **processes** **images** of moving targets and can **overlay** those indications, or different colored dots, on digitized maps containing roads, hills, rivers and vegetation...

?